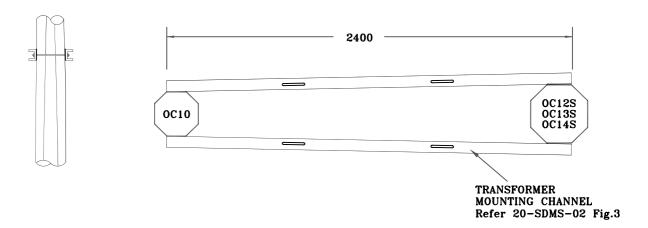


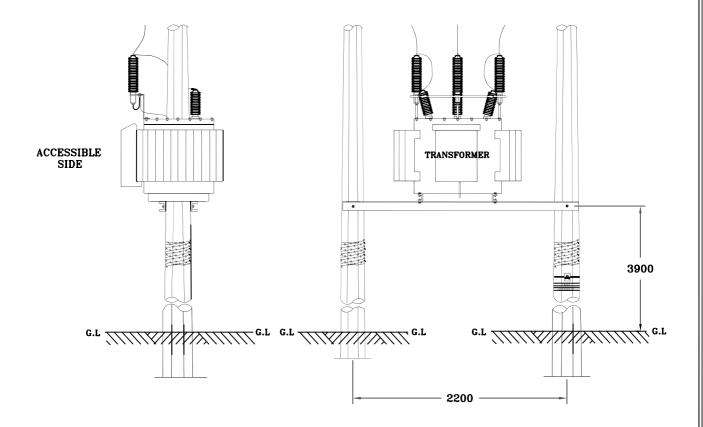
## الشركة السعودية للكهرباء

SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G





DRW.01-POLE MOUNTED TRANSFORMER DETAILED ASSEMBLY STRUCTURE

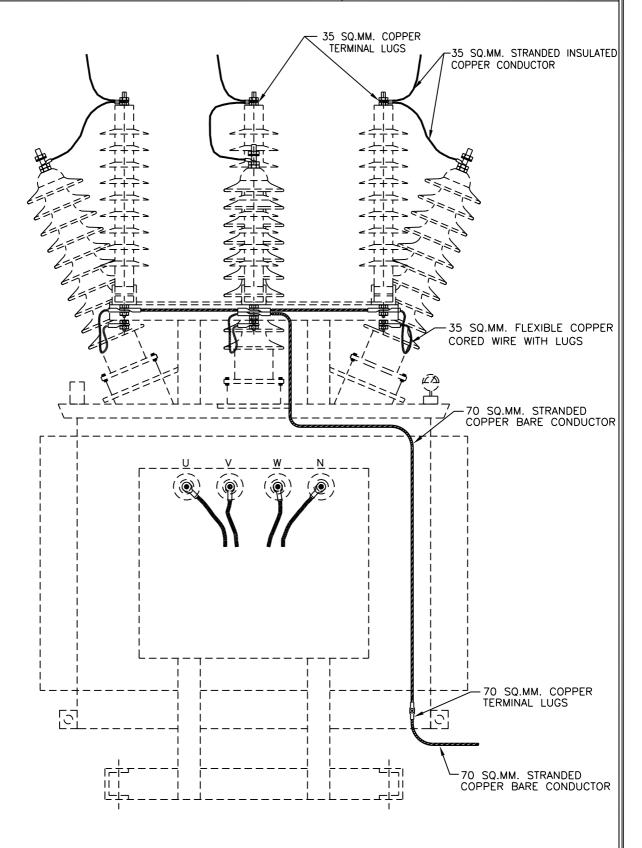


## الشركة السعودية للكهرباء

SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G



DRW.02-POLE MOUNTED TRANSFORMER EARTHING DETAILED DRAWING

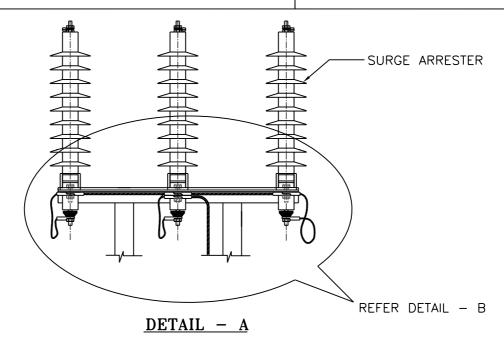


## الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

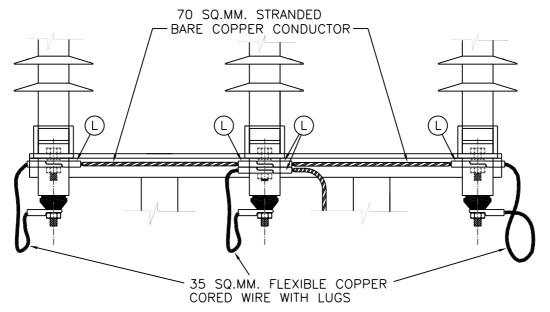
SDCS-01

DATE: DECEMBER 2005G





#### 35 SQ.MM. FLEXIBLE COPPER CORED WIRE WITH LUGS

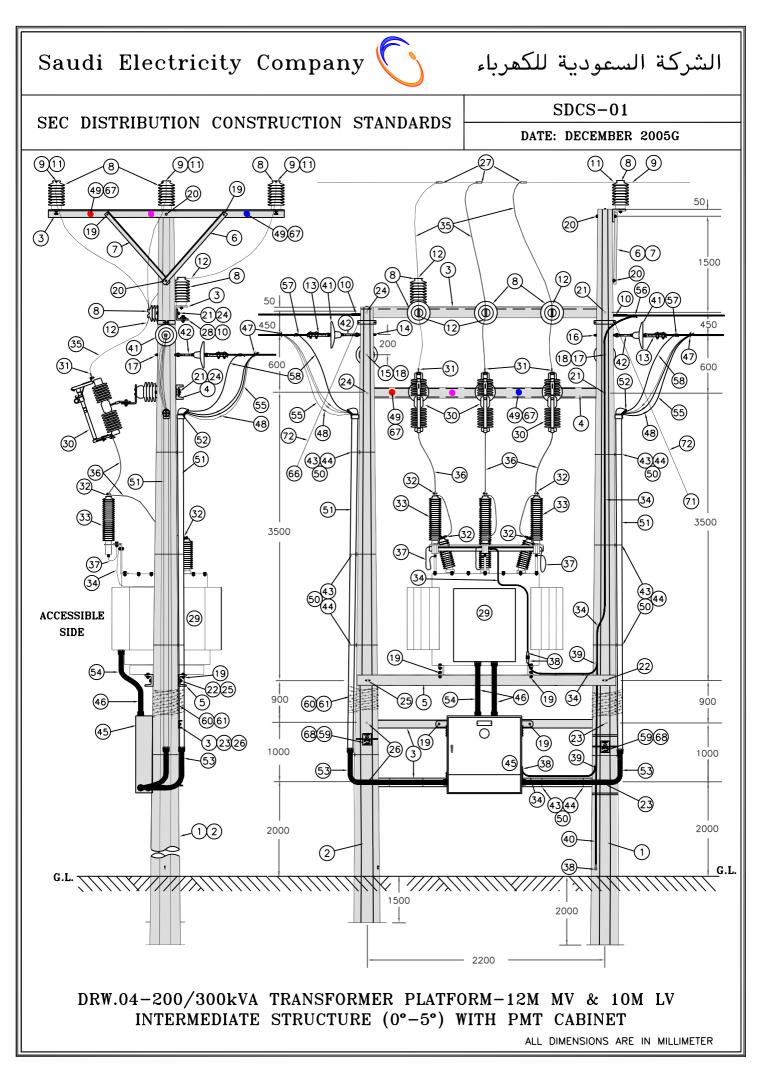


L - 5Nos. 70SQ.MM COPPER TERMINAL LUGS

DETAIL - B

#### DRW.03-LIGHTING ARRESTER EARTHING DETAILED DRAWING

# Saudi Electricity Company الشركة السعودية للكهرباء SDCS-01 SEC DISTRIBUTION CONSTRUCTION STANDARDS DATE: DECEMBER 2005G 200/300kVA PMT ON 12M POLE H-FRAME TRANSFORMER STRUCTURE





# الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFERENCES	
01	1	OC12S-12 Meter Steel Pole, HDG, Single Circuit	20-SDMS-01	Page 34
02	1	OC10-10 Meter Steel Pole, HDG, LV Single Circuit	20-SDMS-01	Page 33
03	4	Crossarm-L 100x100x12x2400mm L.G.	20-SDMS-02	Fig. 1
04	1	Fuse Cut-Out Mounting Channel-C 125x65x65x6x2400mm L.G.	20-SDMS-02	Fig. 2
05	2	Transformer Mounting Channel—C 150x75x75x6.5x2400mm L.G.	20-SDMS-02	Fig. 3
06	1	Brace-L 50x50x4x828mm L.G.	20-SDMS-02	Fig. 4
07	1	Brace-L 50x50x4x828mm L.G. With One End Clipped	20-SDMS-02	Fig. 4
08	7	Line Post Insulator	15-SDMS-01	Clause 4.2.8
09	3 Set	Preformed Armour Rods for 170.5mm2 ACSR/AW (Merlin)	20-SDMS-02	Fig. 38
10	2 Set	Preformed Armour Rod for 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 38
11	3 Set	Preformed Line Post Insulator Top Tie for Merlin ACSR With Armour	20-SDMS-02	Fig. 35
12	4 Set	Preformed Line Post Insulator Top Tie for Quail	20-SDMS-02	Fig. 35
13	4	Strain Clamp, Straight Line Deadend Type for Quadruplex	20-SDMS-02	Fig. 30
14	1	Shoulder Eye Bolt, M16x155mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
15	1	Shoulder Eye Bolt, M16x180mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
16	1	Shoulder Eye Bolt, M16x235mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
17	1	Shoulder Eye Bolt, M16x265mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
18	2	Eye Nut, M16	20-SDMS-02	Fig. 18
19	10	Machine Bolt, M20x60mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 14
20	2	Machine Bolt, M20x225mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
21	2	Machine Bolt, M20x265mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
22	1	Machine Bolt, M20x325mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
23	2	Machine Bolt, M20x365mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
24	2	Machine Bolt, M16x165mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
25	1	Machine Bolt, M16x275mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
26	2	Machine Bolt, M16x300mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
27	3	Parallel Groove Compression Connector for Merlin — Quail	20-SDMS-02	Fig. 39
28	2	Earthwire Support Plate, L 110x110x10x150mm L.G.	20-SDMS-02	Fig. 6
29	1	Transformer, 200KVA.	51-SDMS-01	
30	3	Fuse Cut-Out (Complete Assembly)	34-SDMS-01	
31	3	Terminal Plug For 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 42
32	9	Terminal Lug for 35mm2 Cu.	12-SDMS-02	
33	3	Surge Arrester, 33kV	35-SDMS-01	
34	15M	70mm2 Copper Bare Conductor		
35	15M	Quail Conductor, 67.44mm2 ACSR/AW	10-SDMS-01	
36	9М	Cu. Conductor, Insulated stranded 35mm2 Soft Drawn	11-SDMS-01	
37	3	35mm2 Cu. Flexible Cored Wire with Lugs	20-SDMS-02	

DRW.04A1/2-200kVA TRANSFORMER PLATFORM, 12M MV & 10M LV INTERMEDIATE STRUCTURE (0°-5°) WITH PMT CABINET



## الشركة السعودية للكهرباء

## SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFERE	NCES
38	13	Terminal Lugs for 70mm2, Cu.	12-SDMS-01	
39	2	Crimpit Cu. Connector For 70mm2.	20-SDMS-02	Fig. 45
40	1	Ground Wire Guard	20-SDMS-02	Fig. 47
41	4	Suspension Insulator	15-SDMS-01	Clause 4.2.5
42	4	Clevis Eye Extension	20-SDMS-02	Fig. 21
43	15M	Stainless Steel Strap Band	20-SDMS-02	Fig. 55
44	20	Buckle for Stainless Steel Strap Band	20-SDMS-02	Fig. 55
45	1	P.M.T. Cabinet 800A.	31-SDMS-03	
46	6М	Cable Aluminium— 4x300mm2 Main Incoming	11-SDMS-01	
47	4	Cable Tie	20-SDMS-02	Fig. 63
48	12	Insulated Type Sleeve for Connecting Quadruplex 120mm2-120mm2	20-SDMS-02	Fig. 34
49	2 Set	Phasing Plates (A,B,C).	20-SDMS-02	Fig. 53
50	6М	Rigid PVC Sleeve for Stainless Steel Strap	20-SDMS-02	Fig. 55
51	4	Polyethelene Rigid Pipe, 3Mtrs. 70mm O.D. 3mm Thickness	20-SDMS-02	
52	4	Weather Head, Al. for 70mm O.D. Polyethelene Rigid Pipe	20-SDMS-02	
53	4	Flexible Pipe, 2.5 Mtrs., 70mm O.D. Polyethelene Rigid Pipe for Outgoing Cable.	20-SDMS-02	
54	2	Flexible Pipe, 2 Mtrs., 75mm I.D for 4x300mm2 Incoming Cable.	20-SDMS-02	
55	36M	Quadruplex Cable, Al. 120mm2	11-SDMS-02	
56	1	Bi-Metalic connector, 2Bolts type for 70mm2 Cu70mm2 Al.	20-SDMS-02	
57	4	Bi-Metalic connector, 2Bolts type for 70mm2 Cu120mm2 Al.	20-SDMS-02	
58	36M	Cu. Conductor, Insulated stranded 70mm2 Soft Drawn		
59	2 Set	Danger Sign Plate Complete With Its Accessories	20-SDMS-02	Fig. 49
60	27M	Anti-Climbing Divice, Barbed Wire	20-SDMS-02	Fig. 13
61	4	Buckle Type, Locking Clip for Barbed Wire	20-SDMS-02	Fig. 13
62	1	Pole Numbering Base Plate	20-SDMS-02	Fig. 51
63	1 Set	Pole Numbering Plates	20-SDMS-02	Fig. 51
64	1	Equipment Numbering Base Plate	20-SDMS-02	Fig. 52
65	1 Set	Equipment Numbering Plates	20-SDMS-02	Fig. 52
66	1 Set	L.T One Stay Assembly (Optional)	SDCS-01	Drw. 310
67	6	Phasing Plates Mounting Brackets	20-SDMS-02	Fig. 54
68	2 Set	Danger Sign Mounting Brackets	20-SDMS-02	Fig. 50
69	16	Terminal Lugs for Cable 4X300mm2 Al.	12-SDMS-02	Fig. 4
70	12	Terminal Lugs for Quadruplex Cable 4X120mm2 Al.	12-SDMS-02	Fig. 4
71	1 Set	L.T One Stay Assembly On PMT— Structure/200	SDCS-01	Drw. 321
72	26M	Stay wire 7/3.25, 9.8mm Dia., HDG steel. UTS 65kN Min. (Optional)	SDCS-01	

DRW.04A2/2-200kVA TRANSFORMER PLATFORM, 12M MV & 10M LV INTERMEDIATE STRUCTURE (0°-5°) WITH PMT CABINET



## الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFERENCES	
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02	1	OC10-10 Meter Steel Pole, HDG, LV Single Circuit	20-SDMS-01	Page 33
03	4	Crossarm-L 100x100x12x2400mm L.G.	20-SDMS-02	Fig. 1
04	1	Fuse Cut-Out Mounting Channel-C 125x65x65x6x2400mm L.G.	20-SDMS-02	Fig. 2
05	2	Transformer Mounting Channel—C 150x75x75x6.5x2400mm L.G.	20-SDMS-02	Fig. 3
06	1	Brace-L 50x50x4x828mm L.G.	20-SDMS-02	Fig. 4
07	1	Brace-L 50x50x4x828mm L.G. With One End Clipped	20-SDMS-02	Fig. 4
08	7	Line Post Insulator	15-SDMS-01	Clause 4.2.8
09	3 Set	Preformed Armour Rods for 170.5mm2 ACSR/AW (Merlin)	20-SDMS-02	Fig. 38
10	2 Set	Preformed Armour Rod for 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 38
11	3 Set	Preformed Line Post Insulator Top Tie for Merlin ACSR With Armour	20-SDMS-02	Fig. 35
12	4 Set	Preformed Line Post Insulator Top Tie for Quail	20-SDMS-02	Fig. 35
13	4	Strain Clamp, Straight Line Deadend Type for Quadruplex	20-SDMS-02	Fig. 30
14	1	Shoulder Eye Bolt, M16x155mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
15	1	Shoulder Eye Bolt, M16x180mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
16	1	Shoulder Eye Bolt, M16x235mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
17	1	Shoulder Eye Bolt, M16x265mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
18	2	Eye Nut, M16	20-SDMS-02	Fig. 18
19	10	Machine Bolt, M20x60mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 14
20	2	Machine Bolt, M20x225mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
21	2	Machine Bolt, M20x265mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
22	1	Machine Bolt, M20x325mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
23	2	Machine Bolt, M20x365mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
24	2	Machine Bolt, M16x165mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
25	1	Machine Bolt, M16x275mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
26	2	Machine Bolt, M16x300mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
27	3	Parallel Groove Compression Connector for Merlin — Quail	20-SDMS-02	Fig. 39
28	2	Earthwire Support Plate, L 110x110x10x150mm Lg.	20-SDMS-02	Fig. 6
29	1	Transformer, 300KVA.	51-SDMS-01	
30	3	Fuse Cut-Out (Complete Assembly)	34-SDMS-01	
31	3	Terminal Plug For 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 42
32	9	Terminal Lug for 35mm2 Cu.	12-SDMS-02	
33	3	Surge Arrester, 33kV	35-SDMS-01	
34	15M	70mm2 Copper Bare Conductor		
35	15M	Quail Conductor, 67.44mm2 ACSR/AW	10-SDMS-01	
36	9М	Cu. Conductor, Insulated stranded 35mm2 Soft Drawn	11-SDMS-01	
37	3	35mm2 Cu. Flexible Cored Wire with Lugs	20-SDMS-02	

DRW.04B1/2-300kVA TRANSFORMER PLATFORM, 12M MV & 10M LV INTERMEDIATE STRUCTURE (0°-5°) WITH PMT CABINET



## الشركة السعودية للكهرباء

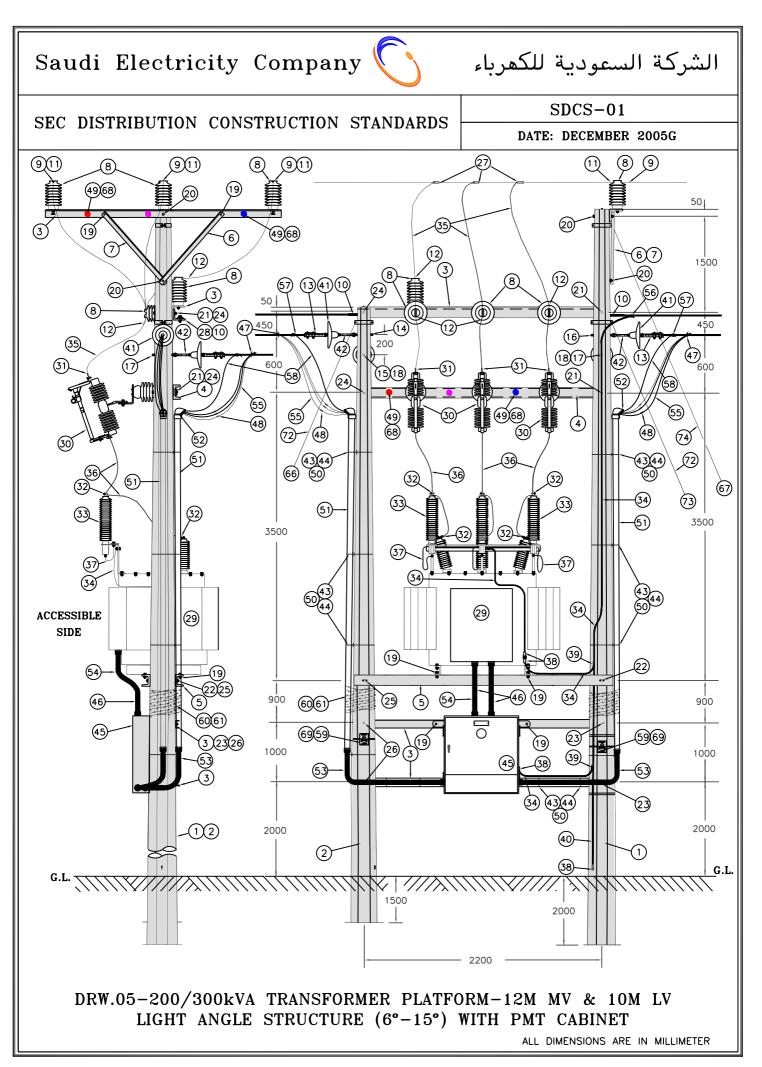
## SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFERE	NCES
38	13	Terminal Lugs for 70mm2, Cu.	12-SDMS-01	
39	2	Crimpit Cu. Connector For 70mm2.	20-SDMS-02	Fig. 45
40	1	Ground Wire Guard	20-SDMS-02	Fig. 47
41	4	Suspension Insulator	15-SDMS-01	Clause 4.2.5
42	4	Clevis Eye Extension	20-SDMS-02	Fig. 21
43	15M	Stainless Steel Strap Band	20-SDMS-02	Fig. 55
44	20	Buckle for Stainless Steel Strap Band	20-SDMS-02	Fig. 55
45	1	P.M.T. Cabinet 800A.	31-SDMS-03	
46	6М	Cable Aluminium— 4x300mm2 Main Incoming	11-SDMS-01	
47	4	Cable Tie	20-SDMS-02	Fig. 63
48	12	Insulated Type Sleeve for Connecting Quadruplex 120mm2-120mm2	20-SDMS-02	Fig. 34
49	2 Set	Phasing Plates (A,B,C).	20-SDMS-02	Fig. 53
50	6M	Rigid PVC Sleeve for Stainless Steel Strap	20-SDMS-02	Fig. 55
51	4	Polyethelene Rigid Pipe, 3Mtrs. 70mm O.D. 3mm Thickness	20-SDMS-02	
52	4	Weather Head, Al. for 70mm O.D. Polyethelene Rigid Pipe	20-SDMS-02	
53	4	Flexible Pipe, 2.5 Mtrs., 70mm O.D. Polyethelene Rigid Pipe for Outgoing Cable.	20-SDMS-02	
54	2	Flexible Pipe, 2 Mtrs., 75mm I.D for 4x300mm2 Incoming Cable.	20-SDMS-02	
55	36M	Quadruplex Cable, Al., 120mm2	11-SDMS-02	
56	1	Bi-Metalic connector, 2Bolts type for 70mm2 Cu70mm2 Al.	20-SDMS-02	
57	4	Bi-Metalic connector, 2Bolts type for 70mm2 Cu120mm2 Al.	20-SDMS-02	
58	36M	Cu. Conductor, Insulated stranded 70mm2 Soft Drawn		
59	2 Set	Danger Sign Plate Complete With Its Accessories	20-SDMS-02	Fig. 49
60	27M	Anti-Climbing Divice, Barbed Wire	20-SDMS-02	Fig. 13
61	4	Buckle Type, Locking Clip for Barbed Wire	20-SDMS-02	Fig. 13
62	1	Pole Numbering Base Plate	20-SDMS-02	Fig. 51
63	1 Set	Pole Numbering Plates	20-SDMS-02	Fig. 51
64	1	Equipment Numbering Base Plate	20-SDMS-02	Fig. 52
65	1 Set	Equipment Numbering Plates	20-SDMS-02	Fig. 52
66	1 Set	L.T One Stay Assembly (Optional)	SDCS-01	Drw. 310
67	6	Phasing Plates Mounting Brackets	20-SDMS-02	Fig. 54
68	2 Set	Danger Sign Mounting Brackets	20-SDMS-02	Fig. 50
69	16	Terminal Lugs for Cable 4X300mm2 Al.	12-SDMS-02	Fig. 4
70	12	Terminal Lugs for Quadruplex Cable 4X120mm2 Al.	12-SDMS-02	Fig. 4
71	1 Set	L.T One Stay Assembly On PMT-Structure/200	SDCS-01	Drw. 321
72	26M	Stay wire 7/3.25, 9.8mm Dia, HDG steel, UTS 65kN Min. (Optional)	SDCS-01	

DRW.04B2/2-300kVA TRANSFORMER PLATFORM, 12M MV & 10M LV INTERMEDIATE STRUCTURE (0°-5°) WITH PMT CABINET





# الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFEREN	ICES
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03	4	Crossarm-L 100x100x12x2400mm L.G.	20-SDMS-02	Fig. 1
04	1	Fuse Cut—Out Mounting Channel—C 125x65x65x6x2400mm L.G.	20-SDMS-02	Fig. 2
05	2	Transformer Mounting Channel—C 150x75x75x6.5x2400mm L.G.	20-SDMS-02	Fig. 3
06	1	Brace-L 50x50x4x828mm L.G.	20-SDMS-02	Fig. 4
07	1	Brace-L 50x50x4x828mm L.G. With One End Clipped	20-SDMS-02	Fig. 4
08	7	Line Post Insulator	15-SDMS-01	Clause 4.2.8
09	3 Set	Preformed Armour Rods for 170.5mm2 ACSR/AW (Merlin)	20-SDMS-02	Fig. 38
10	2 Set	Preformed Armour Rod for 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 38
11	3 Set	Preformed Line Post Insulator Side Tie for Merlin ACSR With Armour	20-SDMS-02	Fig. 35
12	4 Set	Preformed Line Post Insulator Top Tie for Quail	20-SDMS-02	Fig. 35
13	4	Strain Clamp, Straight Line Deadend Type for Quadruplex	20-SDMS-02	Fig. 30
14	1	Shoulder Eye Bolt, M16x155mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
15	1	Shoulder Eye Bolt, M16x180mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
16	1	Shoulder Eye Bolt, M16x235mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
17	1	Shoulder Eye Bolt, M16x265mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
18	2	Eye Nut, M16	20-SDMS-02	Fig. 18
19	10	Machine Bolt, M20x60mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 14
20	2	Machine Bolt, M20x225mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
21	2	Machine Bolt, M20x265mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
22	1	Machine Bolt, M20x325mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
23	2	Machine Bolt, M20x365mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
24	2	Machine Bolt, M16x165mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
25	1	Machine Bolt, M16x275mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
26	2	Machine Bolt, M16x300mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
27	3	Parallel Groove Compression Connector for Merlin — Quail	20-SDMS-02	Fig. 39
28	2	Earthwire Support Plate, L 110x110x10x150mm Lg.	20-SDMS-02	Fig. 6
29	1	Transformer, 200KVA.	51-SDMS-01	
30	3	Fuse Cut-Out (Complete Assembly)	34-SDMS-01	
31	3	Terminal Plug For 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 42
32	9	Terminal Lug for 35mm2 Cu.	12-SDMS-02	
33	3	Surge Arrester, 33kV	35-SDMS-01	
34	15M	70mm2 Copper Bare Conductor		
35	15M	Quail Conductor, 67.44mm2 ACSR/AW	10-SDMS-01	
36	9М	Cu. Conductor, Insulated stranded 35mm2 Soft Drawn	11-SDMS-01	
37	3	35mm2 Cu. Flexible Cored Wire with Lugs	20-SDMS-02	

DRW.05A1/2-200kVA TRANSFORMER PLATFORM, 12M MV & 10M LV LIGHT ANGLE STRUCTURE (6°-15°) WITH PMT CABINET



## الشركة السعودية للكهرباء

## SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

•			DATE. DECEMBER 2000G		
SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION		REFEREN	ICES
38	13	Terminal Lugs for 70mm2, Cu.		12-SDMS-01	
39	2	Crimpit Cu. Connector For 70mm2.		20-SDMS-02	Fig. 45
40	1	Ground Wire Guard		20-SDMS-02	Fig. 47
41	4	Suspension Insulator		15-SDMS-01	Clause 4.2.5
42	4	Clevis Eye Extension		20-SDMS-02	Fig. 21
43	15M	Stainless Steel Strap Band		20-SDMS-02	Fig. 55
44	20	Buckle for Stainless Steel Strap Band		20-SDMS-02	Fig. 55
45	1	P.M.T. Cabinet 800A.		31-SDMS-03	
46	6М	Cable Aluminium— 4x300mm2 Main Incoming		11-SDMS-01	
47	4	Cable Tie		20-SDMS-02	Fig. 63
48	12	Insulated Type Sleeve for Connecting Quadruplex 120mm2-12	0mm2	20-SDMS-02	Fig. 34
49	2 Set	Phasing Plates (A,B,C).		20-SDMS-02	Fig. 53
50	6M	Rigid PVC Sleeve for Stainless Steel Strap		20-SDMS-02	Fig. 55
51	4	Polyethelene Rigid Pipe, 3Mtrs. 70mm O.D. 3mm Thickness		20-SDMS-02	
52	4	Weather Head, Al. for 70mm O.D. Polyethelene Rigid Pipe		20-SDMS-02	
53	4	Flexible Pipe, 2.5 Mtrs., 70mm O.D. Polyethelene Rigid Pipe f	or Outgoing Cable.	20-SDMS-02	
54	2	Flexible Pipe, 2 Mtrs., 75mm I.D for 4x300mm2 Incoming Co	ble.	20-SDMS-02	
55	36M	Quadruplex Cable, Al. 120mm2		11-SDMS-02	
56	1	Bi-Metalic connector, 2Bolts type for 70mm2 Cu70mm2 Al.		20-SDMS-02	
57	4	Bi-Metalic connector, 2Bolts type for 70mm2 Cu120mm2 A	d.	20-SDMS-02	
58	36M	Cu. Conductor, Insulated stranded 70mm2 Soft Drawn			
59	2 Set	Danger Sign Plate Complete With Its Accessories		20-SDMS-02	Fig. 49
60	27M	Anti-Climbing Divice, Barbed Wire		20-SDMS-02	Fig. 13
61	4	Buckle Type, Locking Clip for Barbed Wire		20-SDMS-02	Fig. 13
62	1	Pole Numbering Base Plate		20-SDMS-02	Fig. 51
63	1 Set	Pole Numbering Plates		20-SDMS-02	Fig. 51
64	1	Equipment Numbering Base Plate		20-SDMS-02	Fig. 52
65	1 Set	Equipment Numbering Plates		20-SDMS-02	Fig. 52
66	1 Set	L.T One Stay Assembly (Optional)		SDCS-01	Drw. 310
67	1 Set	M.V—S.C One Stay Assembly		SDCS-01	Drw. 312
68	6	Phasing Plates Mounting Brackets		20-SDMS-02	Fig. 54
69	2 Set	Danger Sign Mounting Brackets		20-SDMS-02	Fig. 50
70	16	Terminal Lugs for Cable 4X300mm2 Al.		12-SDMS-02	Fig. 4
71	12	Terminal Lugs for Quadruplex Cable 4X120mm2 Al.		12-SDMS-02	Fig. 4
72	26M	Stay wire 7/3.25, 9.8mm Dia, HDG steel, UTS 65kN Min. (Op	tional)	SDCS-01	
73	1 Set	L.T One Stay Assembly On PMT-Structure/200		SDCS-01	Drw. 321
74	15M	Stay wire 7/4, 12mm Dia, HDG steel, UTS 101kN (Min.)		SDCS-01	

DRW.05A2/2-200kVA TRANSFORMER PLATFORM, 12M MV & 10M LV LIGHT ANGLE STRUCTURE (6°-15°) WITH PMT CABINET



# الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFEREN	ICES
01	1	OC12S-12 Meter Steel Pole, HDG, Single Circuit	20-SDMS-01	Page 34
02	1	OC10-10 Meter Steel Pole, HDG, LV Single Circuit	20-SDMS-01	Page 33
03	4	Crossarm-L 100x100x12x2400mm L.G.	20-SDMS-02	Fig. 1
04	1	Fuse Cut—Out Mounting Channel—C 125x65x65x6x2400mm L.G.	20-SDMS-02	Fig. 2
05	2	Transformer Mounting Channel—C 150x75x75x6.5x2400mm L.G.	20-SDMS-02	Fig. 3
06	1	Brace-L 50x50x4x828mm L.G.	20-SDMS-02	Fig. 4
07	1	Brace-L 50x50x4x828mm L.G. With One End Clipped	20-SDMS-02	Fig. 4
08	7	Line Post Insulator	15-SDMS-01	Clause 4.2.8
09	3 Set	Preformed Armour Rods for 170.5mm2 ACSR/AW (Merlin)	20-SDMS-02	Fig. 38
10	2 Set	Preformed Armour Rod for 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 38
11	3 Set	Preformed Line Post Insulator Side Tie for Merlin ACSR With Armour	20-SDMS-02	Fig. 35
12	4 Set	Preformed Line Post Insulator Top Tie for Quail	20-SDMS-02	Fig. 35
13	4	Strain Clamp, Straight Line Deadend Type for Quadruplex	20-SDMS-02	Fig. 30
14	1	Shoulder Eye Bolt, M16x155mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
15	1	Shoulder Eye Bolt, M16x180mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
16	1	Shoulder Eye Bolt, M16x235mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
17	1	Shoulder Eye Bolt, M16x265mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
18	2	Eye Nut, M16	20-SDMS-02	Fig. 16
19	10	Machine Bolt, M20x60mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 14
20	2	Machine Bolt, M20x225mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
21	2	Machine Bolt, M20x265mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
22	1	Machine Bolt, M20x325mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
23	2	Machine Bolt, M20x365mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
24	2	Machine Bolt, M16x165mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
25	1	Machine Bolt, M16x275mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
26	2	Machine Bolt, M16x300mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
27	3	Parallel Groove Compression Connector for Merlin — Quail	20-SDMS-02	Fig. 39
28	2	Earthwire Support Plate, L 110x110x10x150mm Lg.	20-SDMS-02	Fig. 6
29	1	Transformer, 300KVA.	51-SDMS-01	
30	3	Fuse Cut-Out (Complete Assembly)	34-SDMS-01	
31	3	Terminal Plug For 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 42
32	9	Terminal Lug for 35mm2 Cu.	12-SDMS-02	
33	3	Surge Arrester, 33kV	35-SDMS-01	
34	15M	70mm2 Copper Bare Conductor		
35	15M	Quail Conductor, 67.44mm2 ACSR/AW	10-SDMS-01	
36	9М	Cu. Conductor, Insulated stranded 35mm2 Soft Drawn	11-SDMS-01	
37	3	35mm2 Cu. Flexible Cored Wire with Lugs	20-SDMS-02	

DRW.05B1/2-300kVA TRANSFORMER PLATFORM, 12M MV & 10M LV LIGHT ANGLE STRUCTURE (6°-15°) WITH PMT CABINET



## الشركة السعودية للكهرباء

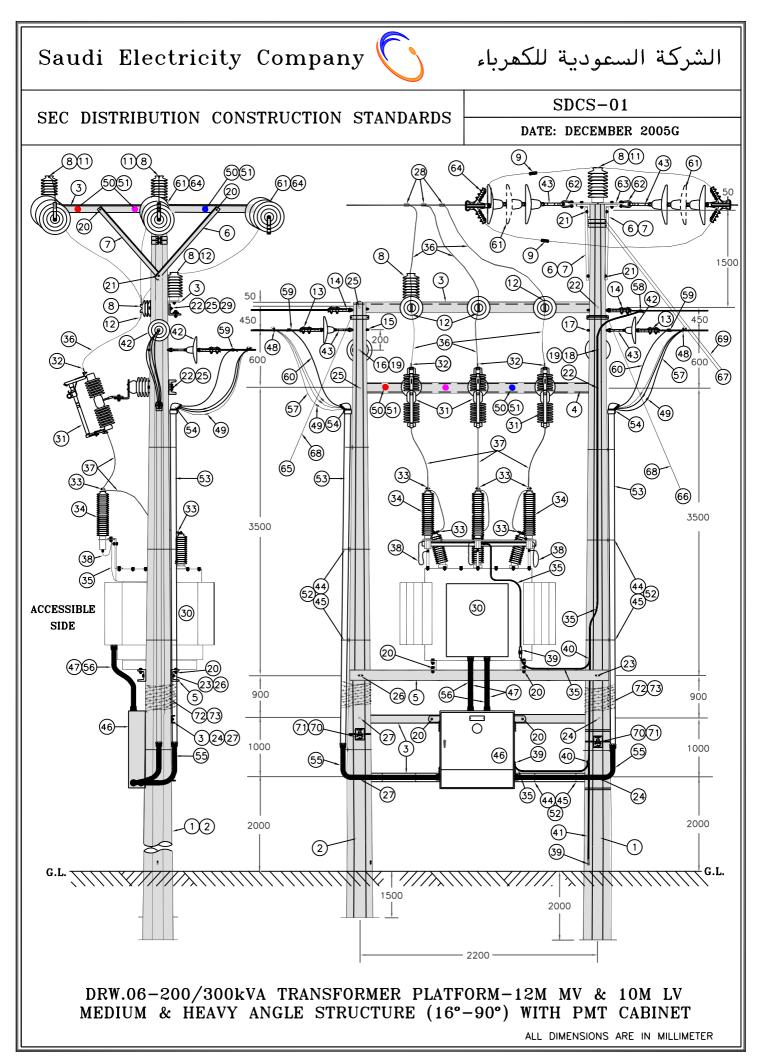
## SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFERE	NCES
38	13	Terminal Lugs for 70mm2, Cu.	12-SDMS-01	
39	2	Crimpit Cu. Connector For 70mm2.	20-SDMS-02	Fig. 45
40	1	Ground Wire Guard	20-SDMS-02	Fig. 47
41	4	Suspension Insulator	15-SDMS-01	Clause 4.2.5
42	4	Clevis Eye Extension	20-SDMS-02	Fig. 21
43	15M	Stainless Steel Strap Band	20-SDMS-02	Fig. 55
44	20	Buckle for Stainless Steel Strap Band	20-SDMS-02	Fig. 55
45	1	P.M.T. Cabinet 800A.	31-SDMS-03	
46	6М	Cable Aluminium— 4x300mm2 Main Incoming	11-SDMS-01	
47	4	Cable Tie	20-SDMS-02	Fig. 63
48	12	Insulated Type Sleeve for Connecting Quadruplex 120mm2—120mm2	20-SDMS-02	Fig. 34
49	2 Set	Phasing Plates (A,B,C).	20-SDMS-02	Fig. 53
50	6М	Rigid PVC Sleeve for Stainless Steel Strap	20-SDMS-02	Fig. 55
51	4	Polyethelene Rigid Pipe, 3Mtrs. 70mm O.D. 3mm Thickness	20-SDMS-02	
52	4	Weather Head, Al. for 70mm O.D. Polyethelene Rigid Pipe	20-SDMS-02	
53	4	Flexible Pipe, 2.5 Mtrs. 70mm O.D. Polyethelene Rigid Pipe for Outgoing Cable	20-SDMS-02	
54	2	Flexible Pipe, 2 Mtr. 75mm I.D for 4x300mm2 Incoming Cable	20-SDMS-02	
55	36M	Quadruplex Cable, Al. 120mm2	11-SDMS-02	
56	1	Bi-Metalic connector, 2Bolts type for 70mm2 Cu70mm2 Al.	20-SDMS-02	
57	4	Bi-Metalic connector, 2Bolts type for 70mm2 Cu120mm2 Al.	20-SDMS-02	
58	36M	Cu. Conductor, Insulated stranded 70mm2 Soft Drawn		
59	2 Set	Danger Sign Plate Complete With Its Accessories	11-SDMS-01	Fig. 49
60	27M	Anti-Climbing Divice, Barbed Wire	20-SDMS-02	Fig. 13
61	4	Buckle Type, Locking Clip for Barbed Wire	20-SDMS-02	Fig. 13
62	1	Pole Numbering Base Plate	20-SDMS-02	Fig. 51
63	1 Set	Pole Numbering Plates	20-SDMS-02	Fig. 51
64	1	Equipment Numbering Base Plate	20-SDMS-02	Fig. 52
65	1 Set	Equipment Numbering Plates	20-SDMS-02	Fig. 52
66	1 Set	L.T One Stay Assembly (Optional)	SDCS-01	Drw. 310
67	1 Set	M.V—S.C One Stay Assembly	SDCS-01	Drw. 312
68	6	Phasing Plates Mounting Brackets	20-SDMS-02	Fig. 54
69	2 Set	Danger Sign Mounting Brackets	20-SDMS-02	Fig. 50
70	16	Terminal Lugs for Cable 4X300mm2 Al.	12-SDMS-02	Fig. 4
71	12	Terminal Lugs for Quadruplex Cable 4X120mm2 Al.	12-SDMS-02	Fig. 4
72	26M	Stay wire 7/3.25, 9.8mm Dia, HDG steel, UTS 65kN Min. (Optional)	SDCS-01	
73	1 Set	L.T One Stay Assembly On PMT-Structure/200	SDCS-01	Drw. 321
74	15M	Stay wire 7/4, 12mm Dia, HDG steel, UTS 101kN (Min.)	SDCS-01	

DRW.05B2/2-300kVA TRANSFORMER PLATFORM, 12M MV & 10M LV LIGHT ANGLE STRUCTURE (6°-15°) WITH PMT CABINET





## الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFERENCES	
01	1	OC12S-12 Meter Steel Pole, HDG, Single Circuit	20-SDMS-01	Page 34
02	1	OC10-10 Meter Steel Pole, HDG, LV Single Circuit	20-SDMS-01	Page 33
03	5	Crossarm-L 100x100x12x2400mm L.G.	20-SDMS-02	Fig. 1
04	1	Fuse Cut—Out Mounting Channel—C 125x65x65x6x2400mm L.G.	20-SDMS-02	Fig. 2
05	2	Transformer Mounting Channel—C 150x75x75x6.5x2400mm L.G.	20-SDMS-02	Fig. 3
06	2	Brace-L 50x50x4x828mm L.G.	20-SDMS-02	Fig. 4
07	2	Brace-L 50x50x4x828mm L.G. With One End Clipped	20-SDMS-02	Fig. 4
08	6	Line Post Insulator	15-SDMS-01	Clause 4.2.8
09	3	Parallel Groove Compression Connecter for 170.5mm2 ACSR/AW (Merlin-Merlin)	20-SDMS-02	Fig. 39
10	1	Parallel Groove Compression Connecter for 67.44mm2 ACSR/AW (Quail-Quail)	20-SDMS-02	Fig. 39
11	2 Set	Preformed Line Post Insulator Top Tie for Merlin ACSR	20-SDMS-02	Fig. 35
12	4 Set	Preformed Line Post Insulator Top Tie for Quail	20-SDMS-02	Fig. 35
13	4	Strain Clamp, Straight Line Deadend Type for Quadruplex	20-SDMS-02	Fig. 30
14	2	Strain Clamp, Straight Line Deadend Type for Quail ACSR	20-SDMS-02	Fig. 30
15	1	Shoulder Eye Bolt, M16x155mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
16	1	Shoulder Eye Bolt, M16x180mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
17	1	Shoulder Eye Bolt, M16x235mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
18	1	Shoulder Eye Bolt, M16x265mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
19	2	Eye Nut, M16	20-SDMS-02	Fig. 16
20	18	Machine Bolt, M20x60mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 14
21	2	Machine Bolt, M20x225mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
22	2	Machine Bolt, M20x265mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
23	1	Machine Bolt, M20x325mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
24	2	Machine Bolt, M20x365mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
25	2	Machine Bolt, M16x165mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
26	1	Machine Bolt, M16x275mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
27	2	Machine Bolt, M16x300mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
28	3	Parallel Groove Compression Connector for Merlin — Quail	20-SDMS-02	Fig. 39
29	2	Earthwire Suspension Support, L 110x110x10x150mm Lg.	20-SDMS-02	Fig. 5
30	1	Transformer, 200KVA.	51-SDMS-01	
31	3	Fuse Cut-Out (Complete Assembly)	34-SDMS-01	
32	3	Terminal Plug For 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 42
33	9	Terminal Lug for 35mm2 Cu.	12-SDMS-02	
34	3	Surge Arrester, 33kV	35-SDMS-01	
35	15M	70mm2 Copper Bare Conductor		
36	15M	Quail Conductor, 67.44mm2 ACSR/AW	10-SDMS-01	
37	9М	Cu. Conductor, Insulated stranded 35mm2 Soft Drawn	11-SDMS-01	

DRW.06A1/3-200kVA TRANSFORMER PLATFORM, 12M MV & 10M LV MEDIUM & HEAVY ANGLE STRUCTURE (16°-90°) WITH PMT CABINET



## الشركة السعودية للكهرباء

## SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFER	ENCES
38	3	35mm2 Cu. Flexible Cored Wire with Lugs	20-SDMS-03	2
39	13	Terminal Lugs for 70mm2, Cu.	12-SDMS-0	1
40	2	Crimpit Cu. Connector For 70mm2.	20-SDMS-03	? Fig. 45
41	1	Ground Wire Guard	20-SDMS-03	Fig. 47
42	4	Suspension Insulator (Single)	15-SDMS-0	Page.23
43	10	Clevis Eye Extension	20-SDMS-03	Fig. 21
44	15M	Stainless Steel Strap Band	20-SDMS-02	? Fig. 55
45	20	Buckle for Stainless Steel Strap Band	20-SDMS-03	? Fig. 55
46	1	P.M.T. Cabinet 800A.	31-SDMS-0	3
47	6М	Cable Aluminium— 4x300mm2 Main Incoming	11-SDMS-0	
48	4	Cable Tie	20-SDMS-03	? Fig. 63
49	12	Insulated Type Sleeve for Connecting Quadruplex 120mm2	2-120mm2 20-spms-0	Fig. 34
50	2 Set	Phasing Plates (A,B,C).	20-SDMS-03	Fig. 53
51	6	Phasing Plates Mounting Brackets	20-SDMS-03	? Fig. 54
52	6M	Rigid PVC Sleeve for Stainless Steel Strap	20-SDMS-03	? Fig. 55
53	4	Polyethelene Rigid Pipe, 3Mtrs. 70mm O.D. 3mm Thickness	ss	
54	4	Weather Head, Al. for 70mm O.D. PVC Rigid Pipe	20-SDMS-03	2
55	4	Flexible Pipe, 2.5 Mtrs., 70mm O.D. PVC Rigid Pipe for C	Outgoing Cable. 20-SDMS-03	2
56	2	Flexible Pipe, 2 Mtrs., 75mm I.D for 4x300mm2 Incoming	Cable. 20-SDMS-03	2
57	36M	Quadruplex Cable, 120mm2	11-SDMS-0	2
58	1	Bi-Metalic connector, 2Bolts type for 70mm2 Cu70mm	2 AI. 20-SDMS-0	2
59	4	Bi-Metalic connector, 2Bolts type for 70mm2 Cu120mr	m2 AI. 20-SDMS-03	2
60	36M	Cu. Conductor, Insulated stranded 70mm2 Soft Drawn	11-SDMS-0	1
61	6 Set	Suspension Insulator	15-SDMS-0	Page. 23
62	6	Anchor Shackle	20-SDMS-03	? Fig. 20
63	3	Double Arming Plate, 100x12x700mm Lg.	20-SDMS-03	? Fig. 07
64	6	Strain Clamp, 3U-Bolts type for Merlin	20-SDMS-03	Fig. 29
65	1 Set	L.T One Stay Assembly (Optional)	SDCS-01	Drw. 310
66	1 Set	L.T One Stay Assembly On PMT-Structure/200	SDCS-01	Drw. 310
67	1 Set	M.V-S.C Two Stay Assembly	SDCS-01	Drw. 313
68	26M	Stay wire 7/3.25, 9.8mm Dia, HDG Steel UTS 65 Min. (C	Optional) SDCS-01	
69	29M	Stay wire 7/4, 12mm Dia, HDG Steel UTS 101kN Min.	SDCS-01	
70	2 Set	Danger Sign Plate Complete With Its Accessories	20-SDMS-03	? Fig. 49
71	2 Set	Danger Sign Mounting Brackets	20-SDMS-03	? Fig. 50
72	27M	Anti-Climbing Divice, Barbed Wire	20-SDMS-03	? Fig. 13
73	4	Buckle Type, Locking Clip for Barbed Wire	20-SDMS-02	? Fig. 13

DRW.06A2/3-200kVA TRANSFORMER PLATFORM, 12M MV & 10M LV MEDIUM & HEAVY ANGLE STRUCTURE (16°-90°) WITH PMT CABINET



## الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

			DATE: DECEMBER 2003G			
SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION		REFEREN	NCES	
74	16	Terminal Lugs for Cable 4X300mm2 Al.		12-SDMS-02	Fig. 4	
75	12	Terminal Lugs for Quadruplex Cable 4X120mm2 Al.		12-SDMS-02	Fig. 4	
76	1	Pole Numbering Base Plate		20-SDMS-02	Fig. 51	
77	1 Set	Pole Numbering Plates		20-SDMS-02	Fig. 51	
78	1	Equipment Numbering Base Plate		20-SDMS-02	Fig. 52	
79	1 Set	Equipment Numbering Plates		20-SDMS-02	Fig. 52	
1						

DRW.06A3/3-200kVA TRANSFORMER PLATFORM, 12M MV & 10M LV MEDIUM & HEAVY ANGLE STRUCTURE (16°-90°) WITH PMT CABINET



## الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFERENCES	
01	1	OC12S-12 Meter Steel Pole, HDG, Single Circuit	20-SDMS-01	Page 34
02	1	OC10-10 Meter Steel Pole, HDG, LV Single Circuit	20-SDMS-01	Page 33
03	5	Crossarm-L 100x100x12x2400mm L.G.	20-SDMS-02	Fig. 1
04	1	Fuse Cut—Out Mounting Channel—C 125x65x65x6x2400mm L.G.	20-SDMS-02	Fig. 2
05	2	Transformer Mounting Channel—C 150x75x75x6.5x2400mm L.G.	20-SDMS-02	Fig. 3
06	2	Brace-L 50x50x4x828mm L.G.	20-SDMS-02	Fig. 4
07	2	Brace-L 50x50x4x828mm L.G. With One End Clipped	20-SDMS-02	Fig. 4
08	6	Line Post Insulator	15-SDMS-01	Clause 4.2.8
09	3	Parallel Groove Compression Connecter for 170.5mm2 ACSR/AW (Merlin-Merlin)	20-SDMS-02	Fig. 39
10	1	Parallel Groove Compression Connecter for 67.44mm2 ACSR/AW (Quail-Quail)	20-SDMS-02	Fig. 39
11	2 Set	Preformed Line Post Insulator Top Tie for Merlin ACSR	20-SDMS-02	Fig. 35
12	4 Set	Preformed Line Post Insulator Top Tie for Quail	20-SDMS-02	Fig. 35
13	4	Strain Clamp, Straight Line Deadend Type for Quadruplex	20-SDMS-02	Fig. 30
14	2	Strain Clamp, Straight Line Deadend Type for Quail ACSR	20-SDMS-02	Fig. 16
15	1	Shoulder Eye Bolt, M16x155mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
16	1	Shoulder Eye Bolt, M16x180mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
17	1	Shoulder Eye Bolt, M16x235mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
18	1	Shoulder Eye Bolt, M16x265mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
19	2	Eye Nut, M16	20-SDMS-02	Fig. 16
20	18	Machine Bolt, M20x60mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 14
21	2	Machine Bolt, M20x225mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
22	2	Machine Bolt, M20x265mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
23	1	Machine Bolt, M20x325mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
24	2	Machine Bolt, M20x365mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
25	2	Machine Bolt, M16x165mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
26	1	Machine Bolt, M16x275mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
27	2	Machine Bolt, M16x300mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
28	3	Parallel Groove Compression Connector for Merlin — Quail	20-SDMS-02	Fig. 39
29	2	Earthwire Suspension Support, L 110x110x10x150mm Lg.	20-SDMS-02	Fig. 5
30	1	Transformer, 300KVA	51-SDMS-01	
31	3	Fuse Cut-Out (Complete Assembly)	34-SDMS-01	
32	3	Terminal Plug For 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 42
33	9	Terminal Lug for 35mm2 Cu.	20-SDMS-02	Fig. 46
34	3	Surge Arrester, 33kV	35-SDMS-01	
35	15M	70mm2 Copper Bare Conductor		
36	15M	Quail Conductor, 67.44mm2 ACSR/AW	10-SDMS-01	
37	9М	Cu. Conductor, Insulated stranded 35mm2 Soft Drawn	11-SDMS-01	

DRW.06B1/3-300kVA TRANSFORMER PLATFORM, 12M MV & 10M LV MEDIUM & HEAVY ANGLE STRUCTURE (16°-90°) WITH PMT CABINET



## الشركة السعودية للكهرباء

## SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFERE	NCES
38	3	35mm2 Cu. Flexible Cored Wire with Lugs	20-SDMS-02	
39	13	Terminal Lugs for 70mm2, Cu.	12-SDMS-01	
40	2	Crimpit Cu. Connector For 70mm2.	20-SDMS-02	Fig. 45
41	1	Ground Wire Guard	20-SDMS-02	Fig. 47
42	4	Suspension Insulator (Single)	15-SDMS-01	Page.23
43	10	Clevis Eye Extension	20-SDMS-02	Fig. 21
44	15M	Stainless Steel Strap Band	20-SDMS-02	Fig. 55
45	20	Buckle for Stainless Steel Strap Band	20-SDMS-02	Fig. 55
46	1	P.M.T. Cabinet 800A.	31-SDMS-03	
47	6М	Cable Aluminium— 4x300mm2 Main Incoming	11-SDMS-01	
48	4	Cable Tie	20-SDMS-02	Fig. 63
49	12	Insulated Type Sleeve for Connecting Quadruplex 120mm2-120mm2	20-SDMS-02	Fig. 34
50	2 Set	Phasing Plates (A,B,C).	20-SDMS-02	Fig. 53
51	6	Phasing Plates Mounting Brackets	20-SDMS-02	Fig. 54
52	6М	Rigid PVC Sleeve for Stainless Steel Strap	20-SDMS-02	Fig. 55
53	4	Polyethelene Rigid Pipe, 3Mtrs. 70mm O.D. 3mm Thickness		
54	4	Weather Head, Al. for 70mm O.D. PVC Rigid Pipe	20-SDMS-02	
55	4	Flexible Pipe, 2.5 Mtrs., 70mm O.D. PVC Rigid Pipe for Outgoing Cable.	20-SDMS-02	
56	2	Flexible Pipe, 2 Mtrs., 75mm I.D for 4x300mm2 Incoming Cable.	20-SDMS-02	
57	36M	Quadruplex Cable, 120mm2	11-SDMS-02	
58	1	Bi-Metalic connector, 2Bolts type for 70mm2 Cu70mm2 Al.	20-SDMS-02	
59	4	Bi-Metalic connector, 2Bolts type for 70mm2 Cu120mm2 Al.	20-SDMS-02	
60	36M	Cu. Conductor, Insulated stranded 70mm2 Soft Drawn	11-SDMS-01	
61	6 Set	Suspension Insulator	15-SDMS-01	Page. 23
62	6	Anchor Shackle	20-SDMS-02	Fig. 20
63	3	Double Arming Plate, 100x12x700mm Lg.	20-SDMS-02	Fig. 07
64	6	Strain Clamp, 3U-Bolts type for Merlin	20-SDMS-02	Fig. 29
65	1 Set	L.T One Stay Assembly (Optional)	SDCS-01	Drw. 310
66	1 Set	L.T One Stay Assembly On PMT-Structure/200	SDCS-01	Drw. 310
67	1 Set	M.V-S.C Two Stay Assembly	SDCS-01	Drw. 313
68	26M	Stay wire 7/3.25, 9.8mm Dia, HDG Steel UTS 65 Min. (Optional)	SDCS-01	
69	29M	Stay wire 7/4, 12mm Dia, HDG Steel UTS 101kN Min.	SDCS-01	
70	2 Set	Danger Sign Plate Complete With Its Accessories	20-SDMS-02	Fig. 49
71	2 Set	Danger Sign Mounting Brackets	20-SDMS-02	Fig. 50
72	27M	Anti-Climbing Divice, Barbed Wire	20-SDMS-02	Fig. 13
73	4	Buckle Type, Locking Clip for Barbed Wire	20-SDMS-02	Fig. 13

DRW.06B2/3-300kVA TRANSFORMER PLATFORM, 12M MV & 10M LV MEDIUM & HEAVY ANGLE STRUCTURE (16°-90°) WITH PMT CABINET



## الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

			DATE: DECEMBER 2003G		
SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION		REFEREN	NCES
74	16	Terminal Lugs for Cable 4X300mm2 Al.		12-SDMS-02	Fig. 4
75	12	Terminal Lugs for Quadruplex Cable 4X120mm2 Al.		12-SDMS-02	Fig. 4
76	1	Pole Numbering Base Plate		20-SDMS-02	Fig. 51
77	1 Set	Pole Numbering Plates		20-SDMS-02	Fig. 51
78	1	Equipment Numbering Base Plate		20-SDMS-02	Fig. 52
79	1 Set	Equipment Numbering Plates		20-SDMS-02	Fig. 52

DRW.06B3/3-300kVA TRANSFORMER PLATFORM, 12M MV & 10M LV MEDIUM & HEAVY ANGLE STRUCTURE (16°-90°) WITH PMT CABINET

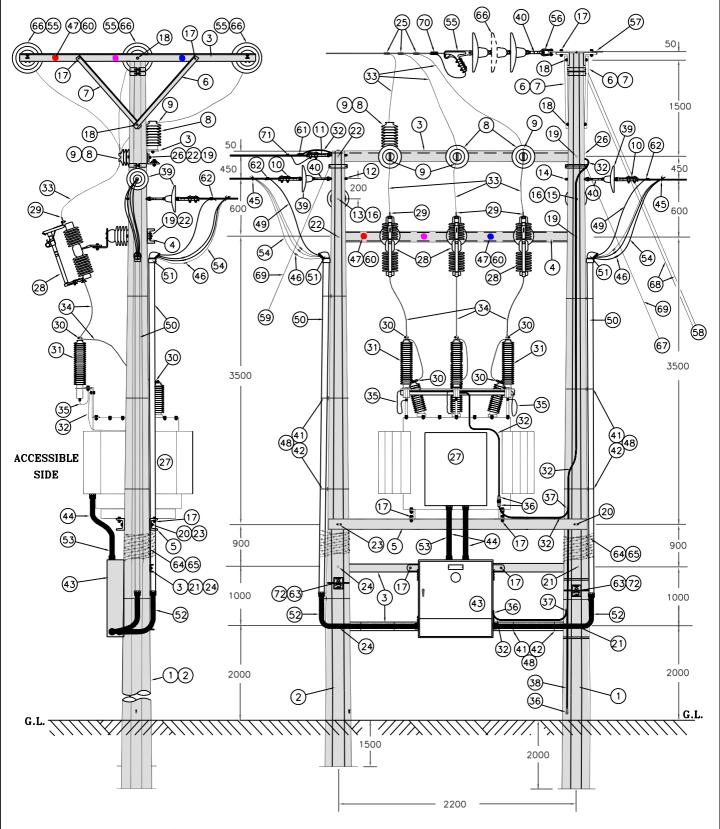


## الشركة السعودية للكهرباء

SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G



DRW.07-200/300kVA TRANSFORMER PLATFORM-12M MV & 10M LV TERMINAL STRUCTURE WITH STAYS & PMT CABINET



## الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

<del></del>	1					
SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFEREN	ICES		
01	1	OC12S-12 Meter Steel Pole, HDG, Single Circuit	20-SDMS-01	Page 34		
02	1	OC10-10 Meter Steel Pole, HDG, LV Single Circuit	20-SDMS-01	Page 33		
03	5	Crossarm-L 100x100x12x2400mm L.G.	20-SDMS-02	Fig. 1		
04	1	Fuse Cut—Out Mounting Channel—C 125x65x65x6x2400mm L.G.	20-SDMS-02	Fig. 2		
05	2	Transformer Mounting Channel—C 150x75x75x6.5x2400mm L.G.	20-SDMS-02	Fig. 3		
06	2	Brace-L 50x50x4x828mm L.G.	20-SDMS-02	Fig. 4		
07	2	Brace-L 50x50x4x828mm L.G. With One End Clipped	20-SDMS-02	Fig. 4		
08	4	Line Post Insulator	15-SDMS-01	Clause 4.2.8		
09	4 Set	Preformed Line Post Insulator Top Tie for Quail	20-SDMS-02	Fig. 35		
10	4	Strain Clamp, Straight Line Deadend Type for Quadruplex	20-SDMS-02	Fig. 30		
11	1	Strain Clamp, Straight Line Deadend Type for Quail ACSR	20-SDMS-02	Fig. 30		
12	1	Shoulder Eye Bolt, M16x155mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16		
13	1	Shoulder Eye Bolt, M16x180mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16		
14	1	Shoulder Eye Bolt, M16x235mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16		
15	1	Shoulder Eye Bolt, M16x265mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16		
16	2	Eye Nut M16	20-SDMS-02	Fig. 18		
17	18	Machine Bolt, M20x60mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 14		
18	2	Machine Bolt, M20x225mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15		
19	2	Machine Bolt, M20x265mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15		
20	1	Machine Bolt, M20x325mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15		
21	2	Machine Bolt, M20x365mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15		
22	2	Machine Bolt, M16x165mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15		
23	1	Machine Bolt, M16x275mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15		
24	2	Machine Bolt, M16x300mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15		
25	3	Parallel Groove Compression Connector for Merlin — Quail	20-SDMS-02	Fig. 39		
26	2	Earthwire Suspension Support, L 110x110x10x150mm Lg.	20-SDMS-02	Fig. 5		
27	1	Transformer, 200KVA.	51-SDMS-01			
28	3	Fuse Cut-Out (Complete Assembly)	34-SDMS-01			
29	3	Terminal Plug For 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 42		
30	9	Terminal Lug for 35mm2 Cu.	20-SDMS-02	Fig. 46		
31	3	Surge Arrester, 33kV	35-SDMS-01			
32	17M	70mm2 Copper Bare Conductor				
33	15M	Quail Conductor, 67.44mm2 ACSR/AW	10-SDMS-01			
34	9М	Cu. Conductor, Insulated Stranded 35mm2 Soft Drawn	11-SDMS-01			
35	3	35mm2 Cu. Flexible Cored Wire with Lugs	20-SDMS-02			
36	13	Terminal Lug for 70mm2 Cu.	12-SDMS-01			
37	2	Crimpit Cu. Connector for 70mm2	20-SDMS-02	Fig. 45		

DRW.07A1/3-200kVA TRANSFORMER PLATFORM-12M MV & 10M LV TERMINAL STRUCTURE WITH STAYS & PMT CABINET



## الشركة السعودية للكهرباء

## SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFEREN	NCES
38	1	Ground Wire Guard	20-SDMS-02	Fig. 47
39	4	Suspension Insulator (Single)	15-SDMS-01	
40	7	Clevis Eye Extension	20-SDMS-02	Fig. 21
41	15M	Stainless Steel Strap Band	20-SDMS-02	Fig. 55
42	20	Buckle for Stainless Steel Strap Band	20-SDMS-02	Fig. 55
43	1	P.M.T. Cabinet 800A	31-SDMS-03	
44	6M	Cable - 4x300mm2 Al. Main Incoming	11-SDMS-01	
45	4	Cable Tie	20-SDMS-02	Fig. 63
46	12	Insulated Type Sleeve for Connecting Quadruplex 120mm2-120mm2	20-SDMS-02	Fig. 34
47	2 Set	Phasing Plates (A,B,C)	20-SDMS-02	Fig. 53
48	6М	Rigid PVC Sleeve for Stainless Steel Strap	20-SDMS-02	Fig. 55
49	36M	Cu. Conductor Insulated, stranded 70mm2 Soft Drawn	11-SDMS-01	
50	4	Polyethelene Rigid Pipe, 3Mtrs. 70mm O.D. 3mm Thickness		
51	4	Weather Head, Al. for 70mm O.D. PVC Rigid Pipe	20-SDMS-02	
52	4	Flexible Pipe, 2.5 Mtrs. 70mm O.D. PVC Rigid Pipe for Outgoing Cable.	20-SDMS-02	
53	2	Flexible Pipe, 2 Mtrs. 75mm I.D for 4X300mm2 Incoming Cable	20-SDMS-02	
54	36M	Quadruplex Cable, 120mm2	11-SDMS-02	
55	3	Strain Clamp, 3 U-Bolts for Merlin	20-SDMS-02	Fig. 29
56	3	Anchor Shackle	20-SDMS-02	Fig. 20
57	3	Double Arming Plate	20-SDMS-02	Fig. 07
58	1 Set	M.V-S.C Two stay Assembly	SDCS-01	Drw. 31
59	1 Set	L.T One stay Assembly (Optional)	SDCS-01	Drw. 31
60	6	Phasing Plates Mounting Brackets	20-SDMS-02	Fig. 54
61	1	Bi-Mettalic Connector, 2 Bolt Type for 70mm2 Cu70mm2 Al.	20-SDMS-02	
62	4	Bi-Mettalic Connector, 2 Bolt Type for 70mm2 Cu120mm2 Al.	20-SDMS-02	
63	2 Set	Danger Sign Plate Complete With Its Accessories	20-SDMS-02	Fig. 49
64	27M	Anti-Climbing Divice, Barbed Wire	20-SDMS-02	Fig. 13
65	4	Buckle Type, Locking Clip for Barbed Wire	20-SDMS-02	Fig. 13
66	3Set	Suspension Insulator	15-SDMS-01	
67	1 Set	L.T One stay Assembly On PMT-Structure/200	SDCS-01	Drw. 32
68	29М	Stay wire 7/4, 12mm Dia, HDG Steel UTS 101kN Min.	SDCS-01	
69	26M	Stay wire 7/3.25, 9.8mm Dia, HDG Steel UTS 65 Min. (Optional)	SDCS-01	
70	3	Parallel Groove Clamp for 3 U-Bolts type for Merlin ACSR	20-SDMS-02	Fig. 39
71	1	Parallel Groove Clamp for two Bolts type for Quail ACSR	20-SDMS-02	Fig. 39
72	2 Set	Danger Sign Mounting Brackets	20-SDMS-02	Fig. 50

DRW.07A2/3-200kVA TRANSFORMER PLATFORM-12M MV & 10M LV TERMINAL STRUCTURE WITH STAYS & PMT CABINET



# الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 20	005G
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		DATE. DECEMBER 20000			
SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION		REFERE	NCES
73	1	Pole Numbering Base Plate		20-SDMS-02	Fig. 51
74	1 Set	Pole Numbering Plates		20-SDMS-02	Fig. 51
75	1	Equipment Numbering Base Plate		20-SDMS-02	Fig. 52
76	1 Set	Equipment Numbering Plates		20-SDMS-02	Fig. 52
77	16	Terminal Lugs for Cable 4X300mm2 Al.		12-SDMS-02	Fig. 4
78	12	Terminal Lugs for Quadruplex Cable 4X120mm2 Al.		12-SDMS-02	Fig. 4

DRW.07A3/3-200kVA TRANSFORMER PLATFORM-12M MV & 10M LV TERMINAL STRUCTURE WITH STAYS & PMT CABINET

# الشركة السعودية للكهرباء Saudi Electricity Company



#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL							
NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFEREN	ICES			
01	1	OC12S-12 Meter Steel Pole, HDG, Single Circuit	20-SDMS-01	Page 34			
02	1	OC10-10 Meter Steel Pole, HDG, LV Single Circuit	20-SDMS-01	Page 33			
03	5	Crossarm-L 100x100x12x2400mm L.G.	20-SDMS-02	Fig. 1			
04	1	Fuse Cut—Out Mounting Channel—C 125x65x65x6x2400mm L.G.	20-SDMS-02	Fig. 2			
05	2	Transformer Mounting Channel—C 150x75x75x6.5x2400mm L.G.	20-SDMS-02	Fig. 3			
06	2	Brace-L 50x50x4x828mm L.G.	20-SDMS-02	Fig. 4			
07	2	Brace-L 50x50x4x828mm L.G. With One End Clipped	20-SDMS-02	•			
08	4	Line Post Insulator	15-SDMS-01	Clause 4.2.8			
09	4 Set	Preformed Line Post Insulator Top Tie for Quail	20-SDMS-02	Fig. 35			
10	4	Strain Clamp, Straight Line Deadend Type for Quadruplex	20-SDMS-02	Fig. 30			
11	1	Strain Clamp, Straight Line Deadend Type for Quail ACSR	20-SDMS-02	Fig. 30			
12	1	Shoulder Eye Bolt, M16x155mm W/Nut, 1 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 16			
13	1	Shoulder Eye Bolt, M16x180mm W/Nut, 1 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 16			
14	1	Shoulder Eye Bolt, M16x235mm W/Nut, 1 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 16			
15	1	Shoulder Eye Bolt, M16x265mm W/Nut, 1 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 16			
16	2	Eye Nut M16	20-SDMS-02	Fig. 18			
17	18	Machine Bolt, M20x60mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 14			
18	2	Machine Bolt, M20x225mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15			
19	2	Machine Bolt, M20x265mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15			
20	1	Machine Bolt, M20x325mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15			
21	2	Machine Bolt, M20x365mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15			
22	2	Machine Bolt, M16x165mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15			
23	1	Machine Bolt, M16x275mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15			
24	2	Machine Bolt, M16x300mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15			
25	3	Parallel Groove Compression Connector for Merlin — Quail	20-SDMS-02	Fig. 39			
26	2	Earthwire Suspension Support, L 110x110x10x150mm Lg.	20-SDMS-02	Fig. 5			
27	1	Transformer, 300KVA.	51-SDMS-01				
28	3	Fuse Cut-Out (Complete Assembly)	34-SDMS-01				
29	3	Terminal Plug For 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 42			
30	9	Terminal Lug for 35mm2 Cu.	20-SDMS-02	Fig. 46			
31	3	Surge Arrester, 33kV	35-SDMS-01				
32	17M	70mm2 Copper Bare Conductor					
33	15M	Quail Conductor, 67.44mm2 ACSR/AW	10-SDMS-01				
34	9М	Cu. Conductor, Insulated Stranded 35mm2 Soft Drawn	11-SDMS-01				
35	3	35mm2 Cu. Flexible Cored Wire with Lugs	20-SDMS-02				
36	13	Terminal Lug for 70mm2 Cu.	12-SDMS-01				
37	2	Crimpit Cu. Connector for 70mm2	20-SDMS-02	Fig. 45			

DRW.07B1/3-300kVA TRANSFORMER PLATFORM-12M MV & 10M LV TERMINAL STRUCTURE WITH STAYS & PMT CABINET



## الشركة السعودية للكهرباء

## SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFEREN	NCES
38	1	Ground Wire Guard	20-SDMS-02	Fig. 47
39	4	Suspension Insulator (Single)	15-SDMS-01	
40	7	Clevis Eye Extension	20-SDMS-02	Fig. 21
41	15M	Stainless Steel Strap Band	20-SDMS-02	Fig. 55
42	20	Buckle for Stainless Steel Strap Band	20-SDMS-02	Fig. 55
43	1	P.M.T. Cabinet 800A	31-SDMS-03	
44	6M	Cable - 4x300mm2 Al. Main Incoming	11-SDMS-01	
45	4	Cable Tie	20-SDMS-02	Fig. 63
46	12	Insulated Type Sleeve for Connecting Quadruplex 120mm2—120mm2	20-SDMS-02	Fig. 34
47	2 Set	Phasing Plates (A,B,C)	20-SDMS-02	Fig. 53
48	6М	Rigid PVC Sleeve for Stainless Steel Strap	20-SDMS-02	Fig. 55
49	36M	Cu. Conductor Insulated, stranded 70mm2 Soft Drawn	11-SDMS-01	
50	4	Polyethelene Rigid Pipe, 3Mtrs. 70mm O.D. 3mm Thickness		
51	4	Weather Head, Al. for 70mm O.D. PVC Rigid Pipe	20-SDMS-02	
52	4	Flexible Pipe, 2.5 Mtrs. 70mm O.D. PVC Rigid Pipe for Outgoing Cable.	20-SDMS-02	
53	2	Flexible Pipe, 2 Mtrs. 75mm I.D for 4X300mm2 Incoming Cable	20-SDMS-02	
54	36M	Quadruplex Cable, 120mm2	11-SDMS-02	
55	3	Strain Clamp, 3 U-Bolts for Merlin	20-SDMS-02	Fig. 29
56	3	Anchor Shackle	20-SDMS-02	Fig. 20
57	3	Double Arming Plate	20-SDMS-02	Fig. 07
58	1 Set	M.V-S.C Two stay Assembly	SDCS-01	Drw. 313
59	1 Set	L.T One stay Assembly (Optional)	SDCS-01	Drw. 310
60	6	Phasing Plates Mounting Brackets	20-SDMS-02	Fig. 54
61	1	Bi-Mettalic Connector, 2 Bolt Type for 70mm2 Cu70mm2 Al.	20-SDMS-02	
62	4	Bi-Mettalic Connector, 2 Bolt Type for 70mm2 Cu120mm2 Al.	20-SDMS-02	
63	2 Set	Danger Sign Plate Complete With Its Accessories	20-SDMS-02	Fig. 49
64	27M	Anti-Climbing Divice, Barbed Wire	20-SDMS-02	Fig. 13
65	4	Buckle Type, Locking Clip for Barbed Wire	20-SDMS-02	Fig. 13
66	3Set	Suspension Insulator	15-SDMS-01	
67	1 Set	L.T One stay Assembly On PMT-Structure/200	SDCS-01	Drw. 321
68	29M	Stay wire 7/4, 12mm Dia, HDG Steel UTS 101kN Min.	SDCS-01	
69	26M	Stay wire 7/3.25, 9.8mm Dia, HDG Steel UTS 65 Min. (Optional)	SDCS-01	
70	3	Parallel Groove Clamp for 3 U-Bolts type for Merlin ACSR	20-SDMS-02	Fig. 39
71	1	Parallel Groove Clamp for two Bolts type for Quail ACSR	20-SDMS-02	Fig. 39
72	2 Set	Danger Sign Mounting Brackets	20-SDMS-02	Fig. 50

DRW.07B2/3-300kVA TRANSFORMER PLATFORM-12M MV & 10M LV TERMINAL STRUCTURE WITH STAYS & PMT CABINET



## الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

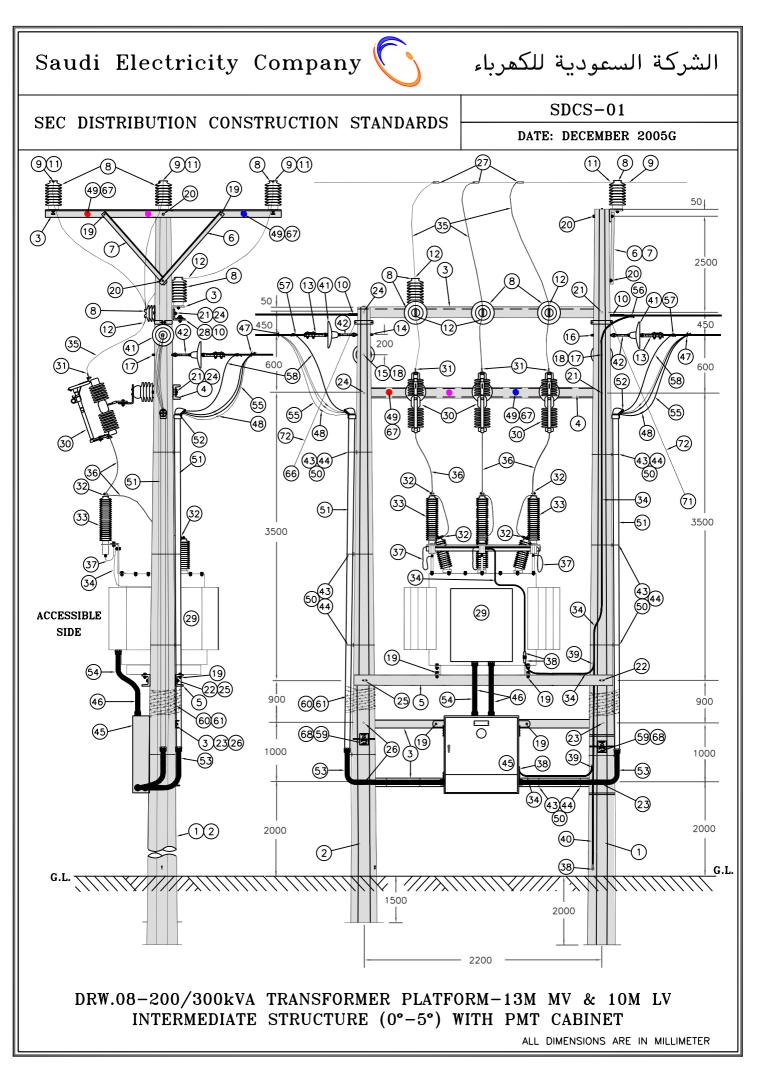
SDCS-01

DATE:	DECEMBER	2005G

			DAIE: DECEMBER 2003G			
SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION		REFERE	REFERENCES	
73	1	Pole Numbering Base Plate		20-SDMS-02	Fig. 51	
74	1 Set	Pole Numbering Plates		20-SDMS-02	Fig. 51	
75	1	Equipment Numbering Base Plate		20-SDMS-02	Fig. 52	
76	1 Set	Equipment Numbering Plates		20-SDMS-02	Fig. 52	
77	16	Terminal Lugs for Cable 4X300mm2 Al.		12-SDMS-02	Fig. 4	
78	12	Terminal Lugs for Quadruplex Cable 4X120mm2 Al.		12-SDMS-02	Fig. 4	
1						

DRW.07B3/3-300kVA TRANSFORMER PLATFORM-12M MV & 10M LV TERMINAL STRUCTURE WITH STAYS & PMT CABINET

# Saudi Electricity Company الشركة السعودية للكهرباء SDCS-01 SEC DISTRIBUTION CONSTRUCTION STANDARDS DATE: DECEMBER 2005G 200/300kVA PMT ON 13M POLE H-FRAME TRANSFORMER STRUCTURE





## الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFEREN	ICES
01	1	OC13S-13 Meter Steel Pole, HDG, Single Circuit	20-SDMS-01	Page 34
02	1	OC10-10 Meter Steel Pole, HDG, LV Single Circuit	20-SDMS-01	Page 33
03	4	Crossarm-L 100x100x12x2400mm L.G.	20-SDMS-02	Fig. 1
04	1	Fuse Cut—Out Mounting Channel—C 125x65x65x6x2400mm L.G.	20-SDMS-02	Fig. 2
05	2	Transformer Mounting Channel—C 150x75x75x6.5x2400mm L.G.	20-SDMS-02	Fig. 3
06	1	Brace-L 50x50x4x828mm L.G.	20-SDMS-02	Fig. 4
07	1	Brace-L 50x50x4x828mm L.G. With One End Clipped	20-SDMS-02	Fig. 4
08	7	Line Post Insulator	15-SDMS-01	Clause 4.2.8
09	3 Set	Preformed Armour Rods for 170.5mm2 ACSR/AW (Merlin)	20-SDMS-02	Fig. 38
10	2 Set	Preformed Armour Rod for 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 38
11	3 Set	Preformed Line Post Insulator Top Tie for Merlin ACSR With Armour	20-SDMS-02	Fig. 35
12	4 Set	Preformed Line Post Insulator Top Tie for Quail	20-SDMS-02	Fig. 35
13	4	Strain Clamp, Straight Line Deadend Type for Quadruplex	20-SDMS-02	Fig. 30
14	1	Shoulder Eye Bolt, M16x155mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
15	1	Shoulder Eye Bolt, M16x180mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
16	1	Shoulder Eye Bolt, M16x255mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
17	1	Shoulder Eye Bolt, M16x285mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
18	2	Eye Nut, M16	20-SDMS-02	Fig. 18
19	10	Machine Bolt, M20x60mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 14
20	2	Machine Bolt, M20x225mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
21	2	Machine Bolt, M20x265mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
22	1	Machine Bolt, M20x365mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
23	2	Machine Bolt, M20x380mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
24	2	Machine Bolt, M16x165mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
25	1	Machine Bolt, M16x275mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
26	2	Machine Bolt, M16x300mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
27	3	Parallel Groove Compression Connector for Merlin — Quail	20-SDMS-02	Fig. 39
28	2	Earthwire Support Plate, L 110x110x10x150mm L.G.	20-SDMS-02	Fig. 6
29	1	Transformer, 200KVA.	51-SDMS-01	
30	3	Fuse Cut-Out (Complete Assembly)	34-SDMS-01	
31	3	Terminal Plug For 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 42
32	9	Terminal Lug for 35mm2 Cu.	12-SDMS-02	
33	3	Surge Arrester, 33kV	35-SDMS-01	
34	15M	70mm2 Copper Bare Conductor		
35	18M	Quail Conductor, 67.44mm2 ACSR/AW	10-SDMS-01	
36	9М	Cu. Conductor, Insulated stranded 35mm2 Soft Drawn	11-SDMS-01	
37	3	35mm2 Cu. Flexible Cored Wire with Lugs	20-SDMS-02	

DRW.08A1/2-200kVA TRANSFORMER PLATFORM, 13M MV & 10M LV INTERMEDIATE STRUCTURE (0°-5°) WITH PMT CABINET



## الشركة السعودية للكهرباء

## SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFERE	NCES
38	13	Terminal Lugs for 70mm2, Cu.	12-SDMS-01	
39	2	Crimpit Cu. Connector For 70mm2.	20-SDMS-02	Fig. 45
40	1	Ground Wire Guard	20-SDMS-02	Fig. 47
41	4	Suspension Insulator	15-SDMS-01	Clause 4.2.5
42	4	Clevis Eye Extension	20-SDMS-02	Fig. 21
43	15M	Stainless Steel Strap Band	20-SDMS-02	Fig. 55
44	20	Buckle for Stainless Steel Strap Band	20-SDMS-02	Fig. 55
45	1	P.M.T. Cabinet 800A.	31-SDMS-03	
46	6М	Cable Aluminium— 4x300mm2 Main Incoming	11-SDMS-01	
47	4	Cable Tie	20-SDMS-02	Fig. 63
48	12	Insulated Type Sleeve for Connecting Quadruplex 120mm2-120mm2	20-SDMS-02	Fig. 34
49	2 Set	Phasing Plates (A,B,C).	20-SDMS-02	Fig. 53
50	6M	Rigid PVC Sleeve for Stainless Steel Strap	20-SDMS-02	Fig. 55
51	4	Polyethelene Rigid Pipe, 3Mtrs. 70mm O.D. 3mm Thickness	20-SDMS-02	
52	4	Weather Head, Al. for 70mm O.D. Polyethelene Rigid Pipe	20-SDMS-02	
53	4	Flexible Pipe, 2.5 Mtrs., 70mm O.D. Polyethelene Rigid Pipe for Outgoing Cable.	20-SDMS-02	
54	2	Flexible Pipe, 2 Mtrs., 75mm I.D for 4x300mm2 Incoming Cable.	20-SDMS-02	
55	36M	Quadruplex Cable, Al. 120mm2	11-SDMS-02	
56	1	Bi-Metalic connector, 2Bolts type for 70mm2 Cu70mm2 Al.	20-SDMS-02	
57	4	Bi-Metalic connector, 2Bolts type for 70mm2 Cu120mm2 Al.	20-SDMS-02	
58	36M	Cu. Conductor, Insulated stranded 70mm2 Soft Drawn		
59	2 Set	Danger Sign Plate Complete With Its Accessories	20-SDMS-02	Fig. 49
60	28M	Anti-Climbing Divice, Barbed Wire	20-SDMS-02	Fig. 13
61	4	Buckle Type, Locking Clip for Barbed Wire	20-SDMS-02	Fig. 13
62	1	Pole Numbering Base Plate	20-SDMS-02	Fig. 51
63	1 Set	Pole Numbering Plates	20-SDMS-02	Fig. 51
64	1	Equipment Numbering Base Plate	20-SDMS-02	Fig. 52
65	1 Set	Equipment Numbering Plates	20-SDMS-02	Fig. 52
66	1 Set	L.T One Stay Assembly (Optional)	SDCS-01	Drw. 310
67	6	Phasing Plates Mounting Brackets	20-SDMS-02	Fig. 54
68	2 Set	Danger Sign Mounting Brackets	20-SDMS-02	Fig. 50
69	16	Terminal Lugs for Cable 4X300mm2 Al.	12-SDMS-02	Fig. 4
70	12	Terminal Lugs for Quadruplex Cable 4X120mm2 Al.	12-SDMS-02	Fig. 4
71	1 Set	L.T One Stay Assembly On PMT- Structure/200	SDCS-01	Drw. 321
72	26M	Stay wire 7/3.25, 9.8mm Dia., HDG steel. UTS 65kN Min. (Optional)	SDCS-01	

DRW.08A2/2-200kVA TRANSFORMER PLATFORM, 13M MV & 10M LV INTERMEDIATE STRUCTURE (0°-5°) WITH PMT CABINET



## الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

		DATE: DEC	DATE: DECEMBER 2000d			
SERIAL QTY		BILL OF MATERIALS DESCRIPTION		REFERENCES		
01	1	OC13S-13 Meter Steel Pole, HDG, Single Circuit	20-SDMS-01 Pag	ige 34		
02	1	OC10-10 Meter Steel Pole, HDG, LV Single Circuit	20-SDMS-01 Pag	ige 33		
03	4	Crossarm-L 100x100x12x2400mm L.G.	20-SDMS-02 Fig	g. 1		
04	1	Fuse Cut-Out Mounting Channel-C 125x65x65x6x2400mm L.G.	20-SDMS-02 Fig	g. 2		
05	2	Transformer Mounting Channel—C 150x75x75x6.5x2400mm L.G.	20-SDMS-02 Fig	g. 3		
06	1	Brace-L 50x50x4x828mm L.G.	20-SDMS-02 Fig	g. 4		
07	1	Brace-L 50x50x4x828mm L.G. With One End Clipped	20-SDMS-02 Fig	g. 4		
08	7	Line Post Insulator		ause 2.8		
09	3 Set	Preformed Armour Rods for 170.5mm2 ACSR/AW (Merlin)	20-SDMS-02 Fig	g. 38		
10	2 Set	Preformed Armour Rod for 67.44mm2 ACSR/AW (Quail)	20-SDMS-02 Fig	g. 38		
11	3 Set	Preformed Line Post Insulator Top Tie for Merlin ACSR With Armour	20-SDMS-02 Fig	g. 35		
12	4 Set	Preformed Line Post Insulator Top Tie for Quail	20-SDMS-02 Fig	g. 35		
13	4	Strain Clamp, Straight Line Deadend Type for Quadruplex	20-SDMS-02 Fig	g. 30		
14	1	Shoulder Eye Bolt, M16x155mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02 Fig	g. 16		
15	1	Shoulder Eye Bolt, M16x180mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02 Fig	g. 16		
16	1	Shoulder Eye Bolt, M16x255mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02 Fig	g. 16		
17	1	Shoulder Eye Bolt, M16x285mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02 Fig	g. 16		
18	2	Eye Nut, M16	20-SDMS-02 Fig	g. 18		
19	10	Machine Bolt, M20x60mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02 Fig	g. 14		
20	2	Machine Bolt, M20x225mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02 Fig	g. 15		
21	2	Machine Bolt, M20x265mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02 Fig	g. 15		
22	1	Machine Bolt, M20x365mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02 Fig	g. 15		
23	2	Machine Bolt, M20x380mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02 Fig	g. 15		
24	2	Machine Bolt, M16x165mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02 Fig	g. 15		
25	1	Machine Bolt, M16x275mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02 Fig	g. 15		
26	2	Machine Bolt, M16x300mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02 Fig	g. 15		
27	3	Parallel Groove Compression Connector for Merlin — Quail	20-SDMS-02 Fig	g. 39		
28	2	Earthwire Support Plate, L 110x110x10x150mm L.G.	20-SDMS-02 Fig	g. 6		
29	1	Transformer, 300KVA.	51-SDMS-01			
30	3	Fuse Cut-Out (Complete Assembly)	34-SDMS-01			
31	3	Terminal Plug For 67.44mm2 ACSR/AW (Quail)	20-SDMS-02 Fig	g. 42		
32	9	Terminal Lug for 35mm2 Cu.	12-SDMS-02			
33	3	Surge Arrester, 33kV	35-SDMS-01			
34	15M	70mm2 Copper Bare Conductor				
35	18M	Quail Conductor, 67.44mm2 ACSR/AW	10-SDMS-01			
36	9М	Cu. Conductor, Insulated stranded 35mm2 Soft Drawn	11-SDMS-01			

DRW.08B1/2-300kVA TRANSFORMER PLATFORM, 13M MV & 10M LV INTERMEDIATE STRUCTURE (0°-5°) WITH PMT CABINET



## الشركة السعودية للكهرباء

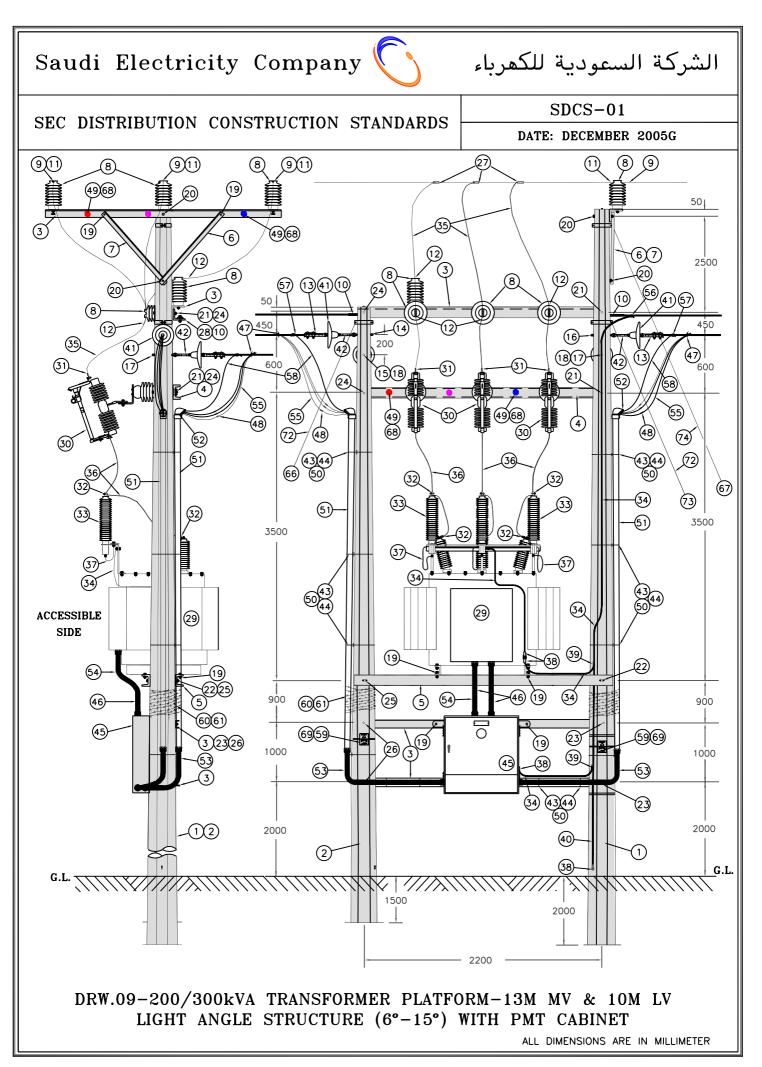
## SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFERE	NCES
38	13	Terminal Lugs for 70mm2, Cu.	12-SDMS-01	
39	2	Crimpit Cu. Connector For 70mm2.	20-SDMS-02	Fig. 45
40	1	Ground Wire Guard	20-SDMS-02	Fig. 47
41	4	Suspension Insulator	15-SDMS-01	Clause 4.2.5
42	4	Clevis Eye Extension	20-SDMS-02	Fig. 21
43	15M	Stainless Steel Strap Band	20-SDMS-02	Fig. 55
44	20	Buckle for Stainless Steel Strap Band	20-SDMS-02	Fig. 55
45	1	P.M.T. Cabinet 800A.	31-SDMS-03	
46	6М	Cable Aluminium— 4x300mm2 Main Incoming	11-SDMS-01	
47	4	Cable Tie	20-SDMS-02	Fig. 63
48	12	Insulated Type Sleeve for Connecting Quadruplex 120mm2-120mm2	20-SDMS-02	Fig. 34
49	2 Set	Phasing Plates (A,B,C).	20-SDMS-02	Fig. 53
50	6М	Rigid PVC Sleeve for Stainless Steel Strap	20-SDMS-02	Fig. 55
51	4	Polyethelene Rigid Pipe, 3Mtrs. 70mm O.D. 3mm Thickness	20-SDMS-02	
52	4	Weather Head, Al. for 70mm O.D. Polyethelene Rigid Pipe	20-SDMS-02	
53	4	Flexible Pipe, 2.5 Mtrs., 70mm O.D. Polyethelene Rigid Pipe for Outgoing Cable.	20-SDMS-02	
54	2	Flexible Pipe, 2 Mtrs., 75mm I.D for 4x300mm2 Incoming Cable.	20-SDMS-02	
55	36M	Quadruplex Cable, Al., 120mm2	11-SDMS-02	
56	1	Bi-Metalic connector, 2Bolts type for 70mm2 Cu70mm2 Al.	20-SDMS-02	
57	4	Bi-Metalic connector, 2Bolts type for 70mm2 Cu120mm2 Al.	20-SDMS-02	
58	36M	Cu. Conductor, Insulated stranded 70mm2 Soft Drawn		
59	2 Set	Danger Sign Plate Complete With Its Accessories	20-SDMS-02	Fig. 49
60	28M	Anti-Climbing Divice, Barbed Wire	20-SDMS-02	Fig. 13
61	4	Buckle Type, Locking Clip for Barbed Wire	20-SDMS-02	Fig. 13
62	1	Pole Numbering Base Plate	20-SDMS-02	Fig. 51
63	1 Set	Pole Numbering Plates	20-SDMS-02	Fig. 51
64	1	Equipment Numbering Base Plate	20-SDMS-02	Fig. 52
65	1 Set	Equipment Numbering Plates	20-SDMS-02	Fig. 52
66	1 Set	L.T One Stay Assembly (Optional)	SDCS-01	Drw. 310
67	6	Phasing Plates Mounting Brackets	20-SDMS-02	Fig. 54
68	2 Set	Danger Sign Mounting Brackets	20-SDMS-02	Fig. 50
69	16	Terminal Lugs for Cable 4X300mm2 Al.	12-SDMS-02	Fig. 4
70	12	Terminal Lugs for Quadruplex Cable 4X120mm2 Al.	12-SDMS-02	Fig. 4
71	1 Set	L.T One Stay Assembly On PMT-Structure/200	SDCS-01	Drw. 321
72	26M	Stay wire 7/3.25, 9.8mm Dia, HDG steel, UTS 65kN Min. (Optional)	SDCS-01	

DRW.08B2/2-300kVA TRANSFORMER PLATFORM, 13M MV & 10M LV INTERMEDIATE STRUCTURE (0°-5°) WITH PMT CABINET TRPF4





## الشركة السعودية للكهرباء

## SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFEREN	REFERENCES	
01	1	OC13S-13 Meter Steel Pole, HDG, Single Circuit	20-SDMS-01	Page 34	
02	1	OC10-10 Meter Steel Pole, HDG, LV Single Circuit	20-SDMS-01	Page 33	
03	4	Crossarm-L 100x100x12x2400mm L.G.	20-SDMS-02	Fig. 1	
04	1	Fuse Cut—Out Mounting Channel—C 125x65x65x6x2400mm L.G.	20-SDMS-02	Fig. 2	
05	2	Transformer Mounting Channel—C 150x75x75x6.5x2400mm L.G.	20-SDMS-02	Fig. 3	
06	1	Brace-L 50x50x4x828mm L.G.	20-SDMS-02	Fig. 4	
07	1	Brace-L 50x50x4x828mm L.G. With One End Clipped	20-SDMS-02	Fig. 4	
08	7	Line Post Insulator	15-SDMS-01	Clause 4.2.8	
09	3 Set	Preformed Armour Rods for 170.5mm2 ACSR/AW (Merlin)	20-SDMS-02	Fig. 38	
10	2 Set	Preformed Armour Rod for 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 38	
11	3 Set	Preformed Line Post Insulator Side Tie for Merlin ACSR With Armour	20-SDMS-02	Fig. 35	
12	4 Set	Preformed Line Post Insulator Top Tie for Quail	20-SDMS-02	Fig. 35	
13	4	Strain Clamp, Straight Line Deadend Type for Quadruplex	20-SDMS-02	Fig. 30	
14	1	Shoulder Eye Bolt, M16x155mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16	
15	1	Shoulder Eye Bolt, M16x180mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16	
16	1	Shoulder Eye Bolt, M16x255mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16	
17	1	Shoulder Eye Bolt, M16x285mm W/Nut, 1 Flat Washer, 1 Spring Washer	20-SDMS-02	Fig. 16	
18	2	Eye Nut, M16	20-SDMS-02	Fig. 18	
19	10	Machine Bolt, M20x60mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 14	
20	2	Machine Bolt, M20x225mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15	
21	2	Machine Bolt, M20x265mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15	
22	1	Machine Bolt, M20x365mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15	
23	2	Machine Bolt, M20x380mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15	
24	2	Machine Bolt, M16x165mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15	
25	1	Machine Bolt, M16x275mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15	
26	2	Machine Bolt, M16x300mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15	
27	3	Parallel Groove Compression Connector for Merlin — Quail	20-SDMS-02	Fig. 39	
28	2	Earthwire Support Plate, L 110x110x10x150mm Lg.	20-SDMS-02	Fig. 6	
29	1	Transformer, 200KVA.	51-SDMS-01		
30	3	Fuse Cut-Out (Complete Assembly)	34-SDMS-01		
31	3	Terminal Plug For 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 42	
32	9	Terminal Lug for 35mm2 Cu.	12-SDMS-02		
33	3	Surge Arrester, 33kV	35-SDMS-01		
34	15M	70mm2 Copper Bare Conductor			
35	18M	Quail Conductor, 67.44mm2 ACSR/AW	10-SDMS-01		
36	9М	Cu. Conductor, Insulated stranded 35mm2 Soft Drawn	11-SDMS-01		
37	3	35mm2 Cu. Flexible Cored Wire with Lugs	20-SDMS-02		

DRW.09A1/2-200kVA TRANSFORMER PLATFORM, 13M MV & 10M LV LIGHT ANGLE STRUCTURE (6°-15°) WITH PMT CABINET



## الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFERE	NCES
38	13	Terminal Lugs for 70mm2, Cu.	12-SDMS-01	
39	2	Crimpit Cu. Connector For 70mm2.	20-SDMS-02	Fig. 45
40	1	Ground Wire Guard	20-SDMS-02	Fig. 47
41	4	Suspension Insulator	15-SDMS-01	Clause 4.2.5
42	4	Clevis Eye Extension	20-SDMS-02	Fig. 21
43	15M	Stainless Steel Strap Band	20-SDMS-02	Fig. 55
44	20	Buckle for Stainless Steel Strap Band	20-SDMS-02	Fig. 55
45	1	P.M.T. Cabinet 800A.	31-SDMS-03	
46	6М	Cable Aluminium— 4x300mm2 Main Incoming	11-SDMS-01	
47	4	Cable Tie	20-SDMS-02	Fig. 63
48	12	Insulated Type Sleeve for Connecting Quadruplex 120mm2—120mm2	20-SDMS-02	Fig. 34
49	2 Set	Phasing Plates (A,B,C).	20-SDMS-02	Fig. 53
50	6M	Rigid PVC Sleeve for Stainless Steel Strap	20-SDMS-02	Fig. 55
51	4	Polyethelene Rigid Pipe, 3Mtrs. 70mm O.D. 3mm Thickness	20-SDMS-02	
52	4	Weather Head, Al. for 70mm O.D. Polyethelene Rigid Pipe	20-SDMS-02	
53	4	Flexible Pipe, 2.5 Mtrs., 70mm O.D. Polyethelene Rigid Pipe for Outgoing Cable.	20-SDMS-02	
54	2	Flexible Pipe, 2 Mtrs., 75mm I.D for 4x300mm2 Incoming Cable.	20-SDMS-02	
55	36M	Quadruplex Cable, Al. 120mm2	11-SDMS-02	
56	1	Bi-Metalic connector, 2Bolts type for 70mm2 Cu70mm2 Al.	20-SDMS-02	
57	4	Bi-Metalic connector, 2Bolts type for 70mm2 Cu120mm2 Al.	20-SDMS-02	
58	36M	Cu. Conductor, Insulated stranded 70mm2 Soft Drawn		
59	2 Set	Danger Sign Plate Complete With Its Accessories	20-SDMS-02	Fig. 49
60	28M	Anti-Climbing Divice, Barbed Wire	20-SDMS-02	Fig. 13
61	4	Buckle Type, Locking Clip for Barbed Wire	20-SDMS-02	Fig. 13
62	1	Pole Numbering Base Plate	20-SDMS-02	Fig. 51
63	1 Set	Pole Numbering Plates	20-SDMS-02	Fig. 51
64	1	Equipment Numbering Base Plate	20-SDMS-02	Fig. 52
65	1 Set	Equipment Numbering Plates	20-SDMS-02	Fig. 52
66	1 Set	L.T One Stay Assembly (Optional)	SDCS-01	Drw. 310
67	1 Set	M.V-S.C One Stay Assembly	SDCS-01	Drw. 312
68	6	Phasing Plates Mounting Brackets	20-SDMS-02	Fig. 54
69	2 Set	Danger Sign Mounting Brackets	20-SDMS-02	Fig. 50
70	16	Terminal Lugs for Cable 4X300mm2 Al.	12-SDMS-02	Fig. 4
71	12	Terminal Lugs for Quadruplex Cable 4X120mm2 Al.	12-SDMS-02	Fig. 4
72	26M	Stay wire 7/3.25, 9.8mm Dia, HDG steel, UTS 65kN Min. (Optional)	SDCS-01	
73	1 Set	L.T One Stay Assembly On PMT-Structure/200	SDCS-01	Drw. 321
74	16M	Stay wire 7/4, 12mm Dia, HDG steel, UTS 101kN (Min.)	SDCS-01	

DRW.09A2/2-200kVA TRANSFORMER PLATFORM, 13M MV & 10M LV LIGHT ANGLE STRUCTURE (6°-15°) WITH PMT CABINET



## الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFEREN	ICES
01	1	OC13S-13 Meter Steel Pole, HDG, Single Circuit	20-SDMS-01	Page 34
02	1	OC10-10 Meter Steel Pole, HDG, LV Single Circuit	20-SDMS-01	Page 33
03	4	Crossarm-L 100x100x12x2400mm L.G.	20-SDMS-02	Fig. 1
04	1	Fuse Cut—Out Mounting Channel—C 125x65x65x6x2400mm L.G.	20-SDMS-02	Fig. 2
05	2	Transformer Mounting Channel—C 150x75x75x6.5x2400mm L.G.	20-SDMS-02	Fig. 3
06	1	Brace-L 50x50x4x828mm L.G.	20-SDMS-02	Fig. 4
07	1	Brace-L 50x50x4x828mm L.G. With One End Clipped	20-SDMS-02	Fig. 4
08	7	Line Post Insulator	15-SDMS-01	Clause 4.2.8
09	3 Set	Preformed Armour Rods for 170.5mm2 ACSR/AW (Merlin)	20-SDMS-02	Fig. 38
10	2 Set	Preformed Armour Rod for 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 38
11	3 Set	Preformed Line Post Insulator Side Tie for Merlin ACSR With Armour	20-SDMS-02	Fig. 35
12	4 Set	Preformed Line Post Insulator Top Tie for Quail	20-SDMS-02	Fig. 35
13	4	Strain Clamp, Straight Line Deadend Type for Quadruplex	20-SDMS-02	Fig. 30
14	1	Shoulder Eye Bolt, M16x155mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
15	1	Shoulder Eye Bolt, M16x180mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
16	1	Shoulder Eye Bolt, M16x255mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
17	1	Shoulder Eye Bolt, M16x285mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
18	2	Eye Nut, M16	20-SDMS-02	Fig. 16
19	10	Machine Bolt, M20x60mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 14
20	2	Machine Bolt, M20x225mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
21	2	Machine Bolt, M20x265mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
22	1	Machine Bolt, M20x365mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
23	2	Machine Bolt, M20x380mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
24	2	Machine Bolt, M16x165mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
25	1	Machine Bolt, M16x275mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
26	2	Machine Bolt, M16x300mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
27	3	Parallel Groove Compression Connector for Merlin — Quail	20-SDMS-02	Fig. 39
28	2	Earthwire Support Plate, L 110x110x10x150mm Lg.	20-SDMS-02	Fig. 6
29	1	Transformer, 300KVA.	51-SDMS-01	
30	3	Fuse Cut-Out (Complete Assembly)	34-SDMS-01	
31	3	Terminal Plug For 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 42
32	9	Terminal Lug for 35mm2 Cu.	12-SDMS-02	
33	3	Surge Arrester, 33kV	35-SDMS-01	
34	15M	70mm2 Copper Bare Conductor		
35	18M	Quail Conductor, 67.44mm2 ACSR/AW	10-SDMS-01	
36	9М	Cu. Conductor, Insulated stranded 35mm2 Soft Drawn	11-SDMS-01	
37	3	35mm2 Cu. Flexible Cored Wire with Lugs	20-SDMS-02	

DRW.09B1/2-300kVA TRANSFORMER PLATFORM, 13M MV & 10M LV LIGHT ANGLE STRUCTURE (6°-15°) WITH PMT CABINET



## الشركة السعودية للكهرباء

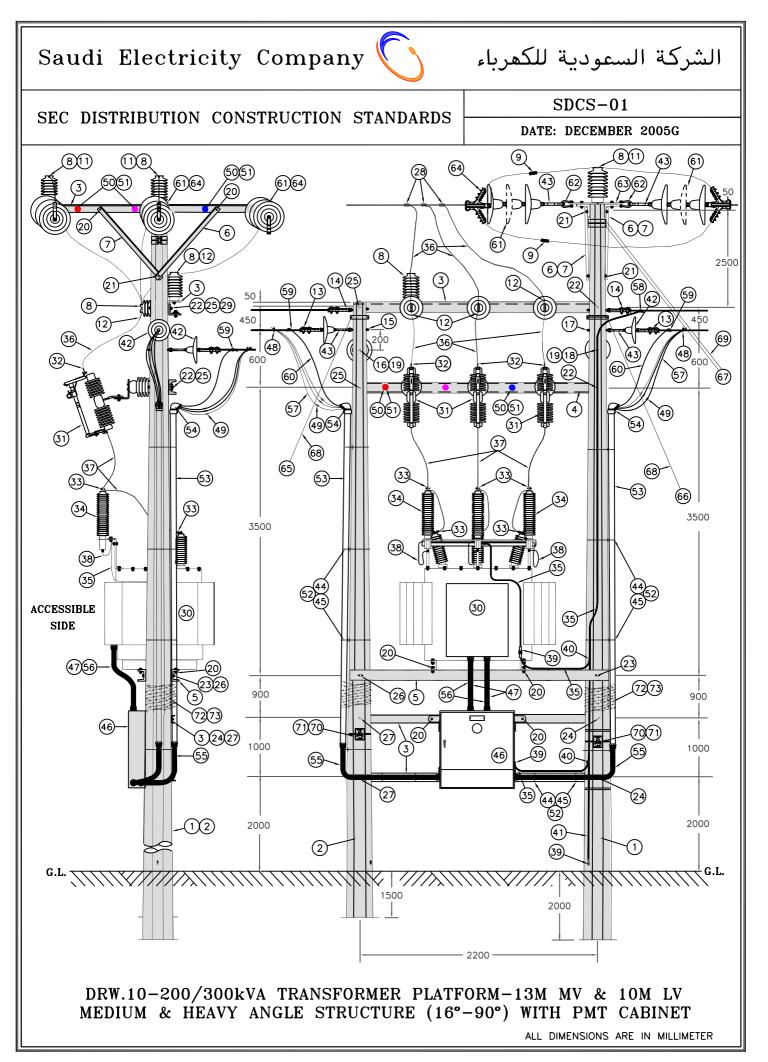
#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFERE	NCES
38	13	Terminal Lugs for 70mm2, Cu.	12-SDMS-01	
39	2	Crimpit Cu. Connector For 70mm2.	20-SDMS-02	Fig. 45
40	1	Ground Wire Guard	20-SDMS-02	Fig. 47
41	4	Suspension Insulator	15-SDMS-01	Clause 4.2.5
42	4	Clevis Eye Extension	20-SDMS-02	Fig. 21
43	15M	Stainless Steel Strap Band	20-SDMS-02	Fig. 55
44	20	Buckle for Stainless Steel Strap Band	20-SDMS-02	Fig. 55
45	1	P.M.T. Cabinet 800A.	31-SDMS-03	
46	6М	Cable Aluminium- 4x300mm2 Main Incoming	11-SDMS-01	
47	4	Cable Tie	20-SDMS-02	Fig. 63
48	12	Insulated Type Sleeve for Connecting Quadruplex 120mm2—120mm2	20-SDMS-02	Fig. 34
49	2 Set	Phasing Plates (A,B,C).	20-SDMS-02	Fig. 53
50	6M	Rigid PVC Sleeve for Stainless Steel Strap	20-SDMS-02	Fig. 55
51	4	Polyethelene Rigid Pipe, 3Mtrs. 70mm O.D. 3mm Thickness	20-SDMS-02	
52	4	Weather Head, Al. for 70mm O.D. Polyethelene Rigid Pipe	20-SDMS-02	
53	4	Flexible Pipe, 2.5 Mtrs. 70mm O.D. Polyethelene Rigid Pipe for Outgoing Cable	20-SDMS-02	
54	2	Flexible Pipe, 2 Mtr. 75mm I.D for 4x300mm2 Incoming Cable	20-SDMS-02	
55	36M	Quadruplex Cable, Al. 120mm2	11-SDMS-02	
56	1	Bi-Metalic connector, 2Bolts type for 70mm2 Cu70mm2 Al.	20-SDMS-02	
57	4	Bi-Metalic connector, 2Bolts type for 70mm2 Cu120mm2 Al.	20-SDMS-02	
58	36M	Cu. Conductor, Insulated stranded 70mm2 Soft Drawn		
59	2 Set	Danger Sign Plate Complete With Its Accessories	11-SDMS-01	Fig. 49
60	28M	Anti-Climbing Divice, Barbed Wire	20-SDMS-02	Fig. 13
61	4	Buckle Type, Locking Clip for Barbed Wire	20-SDMS-02	Fig. 13
62	1	Pole Numbering Base Plate	20-SDMS-02	Fig. 51
63	1 Set	Pole Numbering Plates	20-SDMS-02	Fig. 51
64	1	Equipment Numbering Base Plate	20-SDMS-02	Fig. 52
65	1 Set	Equipment Numbering Plates	20-SDMS-02	Fig. 52
66	1 Set	L.T One Stay Assembly (Optional)	SDCS-01	Drw. 310
67	1 Set	M.V-S.C One Stay Assembly	SDCS-01	Drw. 312
68	6	Phasing Plates Mounting Brackets	20-SDMS-02	Fig. 54
69	2 Set	Danger Sign Mounting Brackets	20-SDMS-02	Fig. 50
70	16	Terminal Lugs for Cable 4X300mm2 Al.	12-SDMS-02	Fig. 4
71	12	Terminal Lugs for Quadruplex Cable 4X120mm2 Al.	12-SDMS-02	Fig. 4
72	26M	Stay wire 7/3.25, 9.8mm Dia, HDG steel, UTS 65kN Min. (Optional)	SDCS-01	
73	1 Set	L.T One Stay Assembly On PMT-Structure/200	SDCS-01	Drw. 321
74	16M	Stay wire 7/4, 12mm Dia, HDG steel, UTS 101kN (Min.)	SDCS-01	

DRW.09B2/2-300kVA TRANSFORMER PLATFORM, 13M MV & 10M LV LIGHT ANGLE STRUCTURE (6°-15°) WITH PMT CABINET





## الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFEREN	ICES
01	1	OC13S-13 Meter Steel Pole, HDG, Single Circuit	20-SDMS-01	Page 35
02	1	OC10-10 Meter Steel Pole, HDG, LV Single Circuit	20-SDMS-01	Page 33
03	5	Crossarm-L 100x100x12x2400mm L.G.	20-SDMS-02	Fig. 1
04	1	Fuse Cut—Out Mounting Channel—C 125x65x65x6x2400mm L.G.	20-SDMS-02	Fig. 2
05	2	Transformer Mounting Channel—C 150x75x75x6.5x2400mm L.G.	20-SDMS-02	Fig. 3
06	2	Brace-L 50x50x4x828mm L.G.	20-SDMS-02	Fig. 4
07	2	Brace-L 50x50x4x828mm L.G. With One End Clipped	20-SDMS-02	Fig. 4
08	6	Line Post Insulator	15-SDMS-01	Clause 4.2.8
09	3	Parallel Groove Compression Connecter for 170.5mm2 ACSR/AW (Merlin-Merlin)	20-SDMS-02	Fig. 39
10	1	Parallel Groove Compression Connecter for 67.44mm2 ACSR/AW (Quail-Quail)	20-SDMS-02	Fig. 39
11	2 Set	Preformed Line Post Insulator Top Tie for Merlin ACSR	20-SDMS-02	Fig. 35
12	4 Set	Preformed Line Post Insulator Top Tie for Quail	20-SDMS-02	Fig. 35
13	4	Strain Clamp, Straight Line Deadend Type for Quadruplex	20-SDMS-02	Fig. 30
14	2	Strain Clamp, Straight Line Deadend Type for Quail ACSR	20-SDMS-02	Fig. 30
15	1	Shoulder Eye Bolt, M16x155mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
16	1	Shoulder Eye Bolt, M16x180mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
17	1	Shoulder Eye Bolt, M16x255mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
18	1	Shoulder Eye Bolt, M16x285mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
19	2	Eye Nut, M16	20-SDMS-02	Fig. 16
20	18	Machine Bolt, M20x60mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 14
21	2	Machine Bolt, M20x225mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
22	2	Machine Bolt, M20x265mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
23	1	Machine Bolt, M20x365mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
24	2	Machine Bolt, M20x380mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
25	2	Machine Bolt, M16x165mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
26	1	Machine Bolt, M16x275mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
27	2	Machine Bolt, M16x300mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
28	3	Parallel Groove Compression Connector for Merlin — Quail	20-SDMS-02	Fig. 39
29	2	Earthwire Suspension Support, L 110x110x10x150mm Lg.	20-SDMS-02	Fig. 5
30	1	Transformer, 200KVA.	51-SDMS-01	
31	3	Fuse Cut-Out (Complete Assembly)	34-SDMS-01	
32	3	Terminal Plug For 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 42
33	9	Terminal Lug for 35mm2 Cu.	12-SDMS-02	
34	3	Surge Arrester, 33kV	35-SDMS-01	
35	15M	70mm2 Copper Bare Conductor		
36	18M	Quail Conductor, 67.44mm2 ACSR/AW	10-SDMS-01	
37	9М	Cu. Conductor, Insulated stranded 35mm2 Soft Drawn	11-SDMS-01	

DRW.10A1/3-200kVA TRANSFORMER PLATFORM, 13M MV & 10M LV MEDIUM & HEAVY ANGLE STRUCTURE (16°-90°) WITH PMT CABINET



## الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFERE	NCES
38	3	35mm2 Cu. Flexible Cored Wire with Lugs	20-SDMS-02	
39	13	Terminal Lugs for 70mm2, Cu.	12-SDMS-01	
40	2	Crimpit Cu. Connector For 70mm2.	20-SDMS-02	Fig. 45
41	1	Ground Wire Guard	20-SDMS-02	Fig. 47
42	4	Suspension Insulator (Single)	15-SDMS-01	Page.23
43	10	Clevis Eye Extension	20-SDMS-02	Fig. 21
44	15M	Stainless Steel Strap Band	20-SDMS-02	Fig. 55
45	20	Buckle for Stainless Steel Strap Band	20-SDMS-02	Fig. 55
46	1	P.M.T. Cabinet 800A.	31-SDMS-03	
47	6М	Cable Aluminium— 4x300mm2 Main Incoming	11-SDMS-01	
48	4	Cable Tie	20-SDMS-02	Fig. 63
49	12	Insulated Type Sleeve for Connecting Quadruplex 120mm2—120mm2	20-SDMS-02	Fig. 34
50	2 Set	Phasing Plates (A,B,C).	20-SDMS-02	Fig. 53
51	6	Phasing Plates Mounting Brackets	20-SDMS-02	Fig. 54
52	6М	Rigid PVC Sleeve for Stainless Steel Strap	20-SDMS-02	Fig. 55
53	4	Polyethelene Rigid Pipe, 3Mtrs. 70mm O.D. 3mm Thickness		
54	4	Weather Head, Al. for 70mm O.D. PVC Rigid Pipe	20-SDMS-02	
55	4	Flexible Pipe, 2.5 Mtrs., 70mm O.D. PVC Rigid Pipe for Outgoing Cable.	20-SDMS-02	
56	2	Flexible Pipe, 2 Mtrs., 75mm I.D for 4x300mm2 Incoming Cable.	20-SDMS-02	
57	36M	Quadruplex Cable, 120mm2	11-SDMS-02	
58	1	Bi-Metalic connector, 2Bolts type for 70mm2 Cu70mm2 Al.	20-SDMS-02	
59	4	Bi-Metalic connector, 2Bolts type for 70mm2 Cu120mm2 Al.	20-SDMS-02	
60	36M	Cu. Conductor, Insulated stranded 70mm2 Soft Drawn	11-SDMS-01	
61	6 Set	Suspension Insulator	15-SDMS-01	Page. 23
62	6	Anchor Shackle	20-SDMS-02	Fig. 20
63	3	Double Arming Plate, 100x12x700mm Lg.	20-SDMS-02	Fig. 07
64	6	Strain Clamp, 3U-Bolts type for Merlin	20-SDMS-02	Fig. 29
65	1 Set	L.T One Stay Assembly (Optional)	SDCS-01	Drw. 310
66	1 Set	L.T One Stay Assembly On PMT-Structure/200	SDCS-01	Drw. 310
67	1 Set	M.V-S.C Two Stay Assembly	SDCS-01	Drw. 313
68	26M	Stay wire 7/3.25, 9.8mm Dia, HDG Steel UTS 65 Min. (Optional)	SDCS-01	
69	32M	Stay wire 7/4, 12mm Dia, HDG Steel UTS 101kN Min.	SDCS-01	
70	2 Set	Danger Sign Plate Complete With Its Accessories	20-SDMS-02	Fig. 49
71	2 Set	Danger Sign Mounting Brackets	20-SDMS-02	Fig. 50
72	28М	Anti-Climbing Divice, Barbed Wire	20-SDMS-02	Fig. 13
73	4	Buckle Type, Locking Clip for Barbed Wire	20-SDMS-02	Fig. 13

DRW.10A2/3-200kVA TRANSFORMER PLATFORM, 13M MV & 10M LV MEDIUM & HEAVY ANGLE STRUCTURE (16°-90°) WITH PMT CABINET



## الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

			DATE: DECEME	DATE: DECEMBER 2005G	
SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION		REFERE	NCES
74	16	Terminal Lugs for Cable 4X300mm2 Al.		12-SDMS-02	Fig. 4
75	12	Terminal Lugs for Quadruplex Cable 4X120mm2 Al.		12-SDMS-02	Fig. 4
76	1	Pole Numbering Base Plate		20-SDMS-02	Fig. 51
77	1 Set	Pole Numbering Plates		20-SDMS-02	Fig. 51
78	1	Equipment Numbering Base Plate		20-SDMS-02	Fig. 52
79	1 Set	Equipment Numbering Plates		20-SDMS-02	Fig. 52

DRW.10A3/3-200kVA TRANSFORMER PLATFORM, 13M MV & 10M LV MEDIUM & HEAVY ANGLE STRUCTURE (16°-90°) WITH PMT CABINET



## الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFEREN	ICES
01	1	OC13S-13 Meter Steel Pole, HDG, Single Circuit	20-SDMS-01	Page 35
02	1	OC10-10 Meter Steel Pole, HDG, LV Single Circuit	20-SDMS-01	Page 33
03	5	Crossarm-L 100x100x12x2400mm L.G.	20-SDMS-02	Fig. 1
04	1	Fuse Cut—Out Mounting Channel—C 125x65x65x6x2400mm L.G.	20-SDMS-02	Fig. 2
05	2	Transformer Mounting Channel—C 150x75x75x6.5x2400mm L.G.	20-SDMS-02	Fig. 3
06	2	Brace-L 50x50x4x828mm L.G.	20-SDMS-02	Fig. 4
07	2	Brace-L 50x50x4x828mm L.G. With One End Clipped	20-SDMS-02	Fig. 4
08	6	Line Post Insulator	15-SDMS-01	Clause 4.2.8
09	3	Parallel Groove Compression Connecter for 170.5mm2 ACSR/AW (Merlin-Merlin)	20-SDMS-02	Fig. 39
10	1	Parallel Groove Compression Connecter for 67.44mm2 ACSR/AW (Quail-Quail)	20-SDMS-02	Fig. 39
11	2 Set	Preformed Line Post Insulator Top Tie for Merlin ACSR	20-SDMS-02	Fig. 35
12	4 Set	Preformed Line Post Insulator Top Tie for Quail	20-SDMS-02	Fig. 35
13	4	Strain Clamp, Straight Line Deadend Type for Quadruplex	20-SDMS-02	Fig. 30
14	2	Strain Clamp, Straight Line Deadend Type for Quail ACSR	20-SDMS-02	Fig. 16
15	1	Shoulder Eye Bolt, M16x155mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
16	1	Shoulder Eye Bolt, M16x180mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
17	1	Shoulder Eye Bolt, M16x255mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
18	1	Shoulder Eye Bolt, M16x285mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
19	2	Eye Nut, M16	20-SDMS-02	Fig. 16
20	18	Machine Bolt, M20x60mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 14
21	2	Machine Bolt, M20x225mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
22	2	Machine Bolt, M20x265mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
23	1	Machine Bolt, M20x365mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
24	2	Machine Bolt, M20x380mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
25	2	Machine Bolt, M16x165mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
26	1	Machine Bolt, M16x275mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
27	2	Machine Bolt, M16x300mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
28	3	Parallel Groove Compression Connector for Merlin — Quail	20-SDMS-02	Fig. 39
29	2	Earthwire Suspension Support, L 110x110x10x150mm Lg.	20-SDMS-02	Fig. 5
30	1	Transformer, 300KVA	51-SDMS-01	
31	3	Fuse Cut-Out (Complete Assembly)	34-SDMS-01	
32	3	Terminal Plug For 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 42
33	9	Terminal Lug for 35mm2 Cu.	20-SDMS-02	Fig. 46
34	3	Surge Arrester, 33kV	35-SDMS-01	
35	15M	70mm2 Copper Bare Conductor		
36	18M	Quail Conductor, 67.44mm2 ACSR/AW	10-SDMS-01	
37	9М	Cu. Conductor, Insulated stranded 35mm2 Soft Drawn	11-SDMS-01	

DRW.10B1/3-300kVA TRANSFORMER PLATFORM, 13M MV & 10M LV MEDIUM & HEAVY ANGLE STRUCTURE (16°-90°) WITH PMT CABINET



## الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFER	ENCES
38	3	35mm2 Cu. Flexible Cored Wire with Lugs	20-SDMS-02	?
39	13	Terminal Lugs for 70mm2, Cu.	12-SDMS-0	
40	2	Crimpit Cu. Connector For 70mm2.	20-SDMS-02	Fig. 45
41	1	Ground Wire Guard	20-SDMS-02	Fig. 47
42	4	Suspension Insulator (Single)	15-SDMS-0	Page.23
43	10	Clevis Eye Extension	20-SDMS-02	Fig. 21
44	15M	Stainless Steel Strap Band	20-SDMS-02	? Fig. 55
45	20	Buckle for Stainless Steel Strap Band	20-SDMS-02	? Fig. 55
46	1	P.M.T. Cabinet 800A.	31-SDMS-03	3
47	6М	Cable Aluminium— 4x300mm2 Main Incoming	11-SDMS-0	
48	4	Cable Tie	20-SDMS-02	? Fig. 63
49	12	Insulated Type Sleeve for Connecting Quadruplex 120mm2	2-120mm2 20-spms-02	Fig. 34
50	2 Set	Phasing Plates (A,B,C).	20-SDMS-02	Fig. 53
51	6	Phasing Plates Mounting Brackets	20-SDMS-02	? Fig. 54
52	6М	Rigid PVC Sleeve for Stainless Steel Strap	20-SDMS-02	? Fig. 55
53	4	Polyethelene Rigid Pipe, 3Mtrs. 70mm O.D. 3mm Thickner	ss	
54	4	Weather Head, Al. for 70mm O.D. PVC Rigid Pipe	20-SDMS-02	?
55	4	Flexible Pipe, 2.5 Mtrs., 70mm O.D. PVC Rigid Pipe for (	Outgoing Cable. 20-SDMS-02	?
56	2	Flexible Pipe, 2 Mtrs., 75mm I.D for 4x300mm2 Incoming	g Cable. 20-SDMS-02	?
57	36M	Quadruplex Cable, 120mm2	11-SDMS-02	?
58	1	Bi-Metalic connector, 2Bolts type for 70mm2 Cu70mm	20-SDMS-03	2
59	4	Bi-Metalic connector, 2Bolts type for 70mm2 Cu120mm	m2 Al. 20-SDMS-03	2
60	36M	Cu. Conductor, Insulated stranded 70mm2 Soft Drawn	11-SDMS-0	
61	6 Set	Suspension Insulator	15-SDMS-0	Page. 23
62	6	Anchor Shackle	20-SDMS-02	Fig. 20
63	3	Double Arming Plate, 100x12x700mm Lg.	20-SDMS-02	? Fig. 07
64	6	Strain Clamp, 3U-Bolts type for Merlin	20-SDMS-02	? Fig. 29
65	1 Set	L.T One Stay Assembly (Optional)	SDCS-01	Drw. 310
66	1 Set	L.T One Stay Assembly On PMT-Structure/200	SDCS-01	Drw. 310
67	1 Set	M.V-S.C Two Stay Assembly	SDCS-01	Drw. 313
68	26M	Stay wire 7/3.25, 9.8mm Dia, HDG Steel UTS 65 Min. (C	Optional) SDCS-01	
69	32M	Stay wire 7/4, 12mm Dia, HDG Steel UTS 101kN Min.	SDCS-01	
70	2 Set	Danger Sign Plate Complete With Its Accessories	20-SDMS-02	Fig. 49
71	2 Set	Danger Sign Mounting Brackets	20-SDMS-02	Pig. 50
72	28M	Anti-Climbing Divice, Barbed Wire	20-SDMS-02	? Fig. 13
73	4	Buckle Type, Locking Clip for Barbed Wire	20-SDMS-02	P. Fig. 13

DRW.10B2/3-300kVA TRANSFORMER PLATFORM, 13M MV & 10M LV MEDIUM & HEAVY ANGLE STRUCTURE (16°-90°) WITH PMT CABINET



## الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

		DATE: DECEMBER 2003G			
SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION		REFEREN	ICES
74	16	Terminal Lugs for Cable 4X300mm2 Al.		12-SDMS-02	Fig. 4
75	12	Terminal Lugs for Quadruplex Cable 4X120mm2 Al.		12-SDMS-02	Fig. 4
76	1	Pole Numbering Base Plate		20-SDMS-02	Fig. 51
77	1 Set	Pole Numbering Plates		20-SDMS-02	Fig. 51
78	1	Equipment Numbering Base Plate		20-SDMS-02	Fig. 52
79	1 Set	Equipment Numbering Plates		20-SDMS-02	Fig. 52
					]

DRW.10B3/3-300kVA TRANSFORMER PLATFORM, 13M MV & 10M LV MEDIUM & HEAVY ANGLE STRUCTURE (16°-90°) WITH PMT CABINET

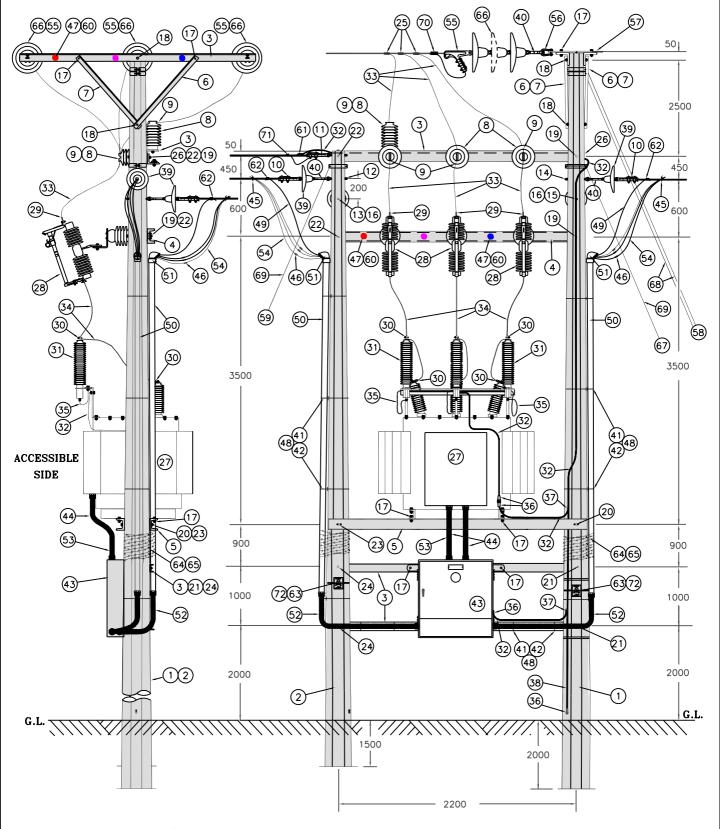


## الشركة السعودية للكهرباء

SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G



DRW.11-200/300kVA TRANSFORMER PLATFORM-13M MV & 10M LV TERMINAL STRUCTURE WITH STAYS & PMT CABINET

ALL DIMENSIONS ARE IN MILLIMETER



## الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFEREN	1CES
01	1	OC13S-13 Meter Steel Pole, HDG, Single Circuit	20-SDMS-01	Page 35
02	1	OC10-10 Meter Steel Pole, HDG, LV Single Circuit	20-SDMS-01	Page 33
03	5	Crossarm-L 100x100x12x2400mm L.G.	20-SDMS-02	Fig. 1
04	1	Fuse Cut-Out Mounting Channel-C 125x65x65x6x2400mm L.G.	20-SDMS-02	Fig. 2
05	2	Transformer Mounting Channel—C 150x75x75x6.5x2400mm L.G.	20-SDMS-02	Fig. 3
06	2	Brace-L 50x50x4x828mm L.G.	20-SDMS-02	Fig. 4
07	2	Brace-L 50x50x4x828mm L.G. With One End Clipped	20-SDMS-02	Fig. 4
08	4	Line Post Insulator	15-SDMS-01	Clause 4.2.8
09	4 Set	Preformed Line Post Insulator Top Tie for Quail	20-SDMS-02	Fig. 35
10	4	Strain Clamp, Straight Line Deadend Type for Quadruplex	20-SDMS-02	Fig. 30
11	1	Strain Clamp, Straight Line Deadend Type for Quail ACSR	20-SDMS-02	Fig. 30
12	1	Shoulder Eye Bolt, M16x155mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
13	1	Shoulder Eye Bolt, M16x180mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
14	1	Shoulder Eye Bolt, M16x255mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
15	1	Shoulder Eye Bolt, M16x285mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
16	2	Eye Nut M16	20-SDMS-02	Fig. 18
17	18	Machine Bolt, M20x60mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 14
18	2	Machine Bolt, M20x225mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
19	2	Machine Bolt, M20x265mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
20	1	Machine Bolt, M20x365mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
21	2	Machine Bolt, M20x380mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
22	2	Machine Bolt, M16x165mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
23	1	Machine Bolt, M16x275mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
24	2	Machine Bolt, M16x300mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
25	3	Parallel Groove Compression Connector for Merlin — Quail	20-SDMS-02	Fig. 39
26	2	Earthwire Suspension Support, L 110x110x10x150mm Lg.	20-SDMS-02	Fig. 5
27	1	Transformer, 200KVA.	51-SDMS-01	
28	3	Fuse Cut-Out (Complete Assembly)	34-SDMS-01	
29	3	Terminal Plug For 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 42
30	9	Terminal Lug for 35mm2 Cu.	20-SDMS-02	Fig. 46
31	3	Surge Arrester, 33kV	35-SDMS-01	
32	17M	70mm2 Copper Bare Conductor		
33	18M	Quail Conductor, 67.44mm2 ACSR/AW	10-SDMS-01	
34	9М	Cu. Conductor, Insulated Stranded 35mm2 Soft Drawn	11-SDMS-01	
35	3	35mm2 Cu. Flexible Cored Wire with Lugs	20-SDMS-02	
36	13	Terminal Lug for 70mm2 Cu.	12-SDMS-01	
37	2	Crimpit Cu. Connector for 70mm2	20-SDMS-02	Fig. 45

DRW.11A1/3-200kVA TRANSFORMER PLATFORM-13M MV & 10M LV TERMINAL STRUCTURE WITH STAYS & PMT CABINET



## الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFEI	ENCES
38	1	Ground Wire Guard	20-SDMS-0	2 Fig. 47
39	4	Suspension Insulator (Single)		1
40	7	Clevis Eye Extension		2 Fig. 21
41	15M	Stainless Steel Strap Band	20-SDMS-0	2 Fig. 55
42	20	Buckle for Stainless Steel Strap Band	20-SDMS-0	2 Fig. 55
43	1	P.M.T. Cabinet 800A	31-SDMS-0	3
44	6М	Cable - 4x300mm2 Al. Main Incoming	11-SDMS-0	1
45	4	Cable Tie	20-SDMS-0	2 Fig. 63
46	12	Insulated Type Sleeve for Connecting Quadruplex 120mm2-	-120mm2 20-SDMS-0	2 Fig. 34
47	2 Set	Phasing Plates (A,B,C)	20-SDMS-0	2 Fig. 53
48	6М	Rigid PVC Sleeve for Stainless Steel Strap	20-SDMS-0	2 Fig. 55
49	36M	Cu. Conductor Insulated, stranded 70mm2 Soft Drawn	11-SDMS-0	1
50	4	Polyethelene Rigid Pipe, 3Mtrs. 70mm O.D. 3mm Thickness	5	
51	4	Weather Head, Al. for 70mm O.D. PVC Rigid Pipe	20-SDMS-0	2
52	4	Flexible Pipe, 2.5 Mtrs. 70mm O.D. PVC Rigid Pipe for Ou	tgoing Cable. 20-SDMS-0	2
53	2	Flexible Pipe, 2 Mtrs. 75mm I.D for 4X300mm2 Incoming	Cable 20-SDMS-0	2
54	36M	Quadruplex Cable, 120mm2	11-SDMS-0	2
55	3	Strain Clamp, 3 U-Bolts for Merlin	20-SDMS-0	2 Fig. 29
56	3	Anchor Shackle	20-SDMS-0	2 Fig. 20
57	3	Double Arming Plate	20-SDMS-0	2 Fig. 07
58	1 Set	M.V-S.C Two stay Assembly	SDCS-01	Drw. 313
59	1 Set	L.T One stay Assembly (Optional)	SDCS-01	Drw. 310
60	6	Phasing Plates Mounting Brackets	20-SDMS-0	2 Fig. 54
61	1	Bi-Mettalic Connector, 2 Bolt Type for 70mm2 Cu70mm	20-SDMS-0	2
62	4	Bi-Mettalic Connector, 2 Bolt Type for 70mm2 Cu120m	m2 AI. 20-SDMS-0	2
63	2 Set	Danger Sign Plate Complete With Its Accessories	20-SDMS-0	2 Fig. 49
64	28M	Anti-Climbing Divice, Barbed Wire	20-SDMS-0	2 Fig. 13
65	4	Buckle Type, Locking Clip for Barbed Wire	20-SDMS-0	2 Fig. 13
66	3Set	Suspension Insulator	15-SDMS-0	1
67	1 Set	L.T One stay Assembly On PMT-Structure/200	SDCS-01	Drw. 321
68	32M	Stay wire 7/4, 12mm Dia, HDG Steel UTS 101kN Min.	SDCS-01	
69	26M	Stay wire 7/3.25, 9.8mm Dia, HDG Steel UTS 65 Min. (0	ptional) SDCS-01	
70	3	Parallel Groove Clamp for 3 U-Bolts type for Merlin ACSR	20-SDMS-0	2 Fig. 39
71	1	Parallel Groove Clamp for two Bolts type for Quail ACSR	20-SDMS-0	2 Fig. 39
72	2 Set	Danger Sign Mounting Brackets	20-SDMS-0	2 Fig. 50

DRW.11A2/3-200kVA TRANSFORMER PLATFORM-13M MV & 10M LV TERMINAL STRUCTURE WITH STAYS & PMT CABINET



# الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

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			DATE: DECEMBER	~000G		
SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION		REFERENCES		
73	1	Pole Numbering Base Plate	20-	-SDMS-02	Fig. 51	
74	1 Set	Pole Numbering Plates	20-	-SDMS-02 F	Fig. 51	
75	1	Equipment Numbering Base Plate	20-	-SDMS-02 F	Fig. 52	
76	1 Set	Equipment Numbering Plates	20-	-SDMS-02 F	Fig. 52	
77	16	Terminal Lugs for Cable 4X300mm2 Al.	12-	-SDMS-02 F	Fig. 4	
78	12	Terminal Lugs for Quadruplex Cable 4X120mm2 Al.	12-	-SDMS-02 F	Fig. 4	
1						

DRW.11A3/3-200kVA TRANSFORMER PLATFORM-13M MV & 10M LV TERMINAL STRUCTURE WITH STAYS & PMT CABINET



## الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFEREN	ICES
01	1	OC13S-13 Meter Steel Pole, HDG, Single Circuit	20-SDMS-01	Page 35
02	1	OC10-10 Meter Steel Pole, HDG, LV Single Circuit	20-SDMS-01	Page 33
03	5	Crossarm-L 100x100x12x2400mm L.G.	20-SDMS-02	Fig. 1
04	1	Fuse Cut—Out Mounting Channel—C 125x65x65x6x2400mm L.G.	20-SDMS-02	Fig. 2
05	2	Transformer Mounting Channel-C 150x75x75x6.5x2400mm L.G.	20-SDMS-02	Fig. 3
06	2	Brace-L 50x50x4x828mm L.G.	20-SDMS-02	Fig. 4
07	2	Brace-L 50x50x4x828mm L.G. With One End Clipped	20-SDMS-02	Fig. 4
08	4	Line Post Insulator	15-SDMS-01	Clause 4.2.8
09	4 Set	Preformed Line Post Insulator Top Tie for Quail	20-SDMS-02	Fig. 35
10	4	Strain Clamp, Straight Line Deadend Type for Quadruplex	20-SDMS-02	Fig. 30
11	1	Strain Clamp, Straight Line Deadend Type for Quail ACSR	20-SDMS-02	Fig. 30
12	1	Shoulder Eye Bolt, M16x155mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
13	1	Shoulder Eye Bolt, M16x180mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
14	1	Shoulder Eye Bolt, M16x255mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
15	1	Shoulder Eye Bolt, M16x285mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
16	2	Eye Nut M16	20-SDMS-02	Fig. 18
17	18	Machine Bolt, M20x60mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 14
18	2	Machine Bolt, M20x225mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
19	2	Machine Bolt, M20x265mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
20	1	Machine Bolt, M20x365mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
21	2	Machine Bolt, M20x380mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
22	2	Machine Bolt, M16x165mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
23	1	Machine Bolt, M16x275mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
24	2	Machine Bolt, M16x300mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
25	3	Parallel Groove Compression Connector for Merlin — Quail	20-SDMS-02	Fig. 39
26	2	Earthwire Suspension Support, L 110x110x10x150mm Lg.	20-SDMS-02	Fig. 5
27	1	Transformer, 300KVA.	51-SDMS-01	
28	3	Fuse Cut-Out (Complete Assembly)	34-SDMS-01	
29	3	Terminal Plug For 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 42
30	9	Terminal Lug for 35mm2 Cu.	20-SDMS-02	Fig. 46
31	3	Surge Arrester, 33kV	35-SDMS-01	
32	17M	70mm2 Copper Bare Conductor		
33	18M	Quail Conductor, 67.44mm2 ACSR/AW	10-SDMS-01	
34	9М	Cu. Conductor, Insulated Stranded 35mm2 Soft Drawn	11-SDMS-01	
35	3	35mm2 Cu. Flexible Cored Wire with Lugs	20-SDMS-02	
36	13	Terminal Lug for 70mm2 Cu.	12-SDMS-01	
37	2	Crimpit Cu. Connector for 70mm2	20-SDMS-02	Fig. 45

DRW.11B1/3-300kVA TRANSFORMER PLATFORM-13M MV & 10M LV TERMINAL STRUCTURE WITH STAYS & PMT CABINET



## الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: SEPTEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFERENCES	
38	1	Ground Wire Guard	20-SDMS-02	Fig. 47
39	4	Suspension Insulator (Single)	15-SDMS-01	
40	7	Clevis Eye Extension	20-SDMS-02	Fig. 21
41	15M	Stainless Steel Strap Band	20-SDMS-02	Fig. 55
42	20	Buckle for Stainless Steel Strap Band	20-SDMS-02	Fig. 55
43	1	P.M.T. Cabinet 800A	31-SDMS-03	
44	6М	Cable — 4x300mm2 Al. Main Incoming	11-SDMS-01	
45	4	Cable Tie	20-SDMS-02	Fig. 63
46	12	Insulated Type Sleeve for Connecting Quadruplex 120mm2-120mm2	20-SDMS-02	Fig. 34
47	2 Set	Phasing Plates (A,B,C)	20-SDMS-02	Fig. 53
48	6М	Rigid PVC Sleeve for Stainless Steel Strap	20-SDMS-02	Fig. 55
49	36M	Cu. Conductor Insulated, stranded 70mm2 Soft Drawn	11-SDMS-01	
50	4	Polyethelene Rigid Pipe, 3Mtrs. 70mm O.D. 3mm Thickness		
51	4	Weather Head, Al. for 70mm O.D. PVC Rigid Pipe	20-SDMS-02	
52	4	Flexible Pipe, 2.5 Mtrs. 70mm O.D. PVC Rigid Pipe for Outgoing Cable.	20-SDMS-02	
53	2	Flexible Pipe, 2 Mtrs. 75mm I.D for 4X300mm2 Incoming Cable	20-SDMS-02	
54	36M	Quadruplex Cable, 120mm2	11-SDMS-02	
55	3	Strain Clamp, 3 U-Bolts for Merlin	20-SDMS-02	Fig. 29
56	3	Anchor Shackle	20-SDMS-02	Fig. 20
57	3	Double Arming Plate	20-SDMS-02	Fig. 07
58	1 Set	M.V-S.C Two stay Assembly	SDCS-01	Drw. 313
59	1 Set	L.T One stay Assembly (Optional)	SDCS-01	Drw. 310
60	6	Phasing Plates Mounting Brackets	20-SDMS-02	Fig. 54
61	1	Bi-Mettalic Connector, 2 Bolt Type for 70mm2 Cu70mm2 Al.	20-SDMS-02	
62	4	Bi-Mettalic Connector, 2 Bolt Type for 70mm2 Cu120mm2 Al.	20-SDMS-02	
63	2 Set	Danger Sign Plate Complete With Its Accessories	20-SDMS-02	Fig. 49
64	28M	Anti-Climbing Divice, Barbed Wire	20-SDMS-02	Fig. 13
65	4	Buckle Type, Locking Clip for Barbed Wire	20-SDMS-02	Fig. 13
66	3Set	Suspension Insulator	15-SDMS-01	
67	1 Set	L.T One stay Assembly On PMT-Structure/200	SDCS-01	Drw. 321
68	32M	Stay wire 7/4, 12mm Dia, HDG Steel UTS 101kN Min.	SDCS-01	
69	26M	Stay wire 7/3.25, 9.8mm Dia, HDG Steel UTS 65 Min. (Optional)	SDCS-01	
70	3	Parallel Groove Clamp for 3 U-Bolts type for Merlin ACSR	20-SDMS-02	Fig. 39
71	1	Parallel Groove Clamp for two Bolts type for Quail ACSR	20-SDMS-02	Fig. 39
72	2 Set	Danger Sign Mounting Brackets	20-SDMS-02	Fig. 50

DRW.11B2/3-300kVA TRANSFORMER PLATFORM-13M MV & 10M LV TERMINAL STRUCTURE WITH STAYS & PMT CABINET



## الشركة السعودية للكهرباء

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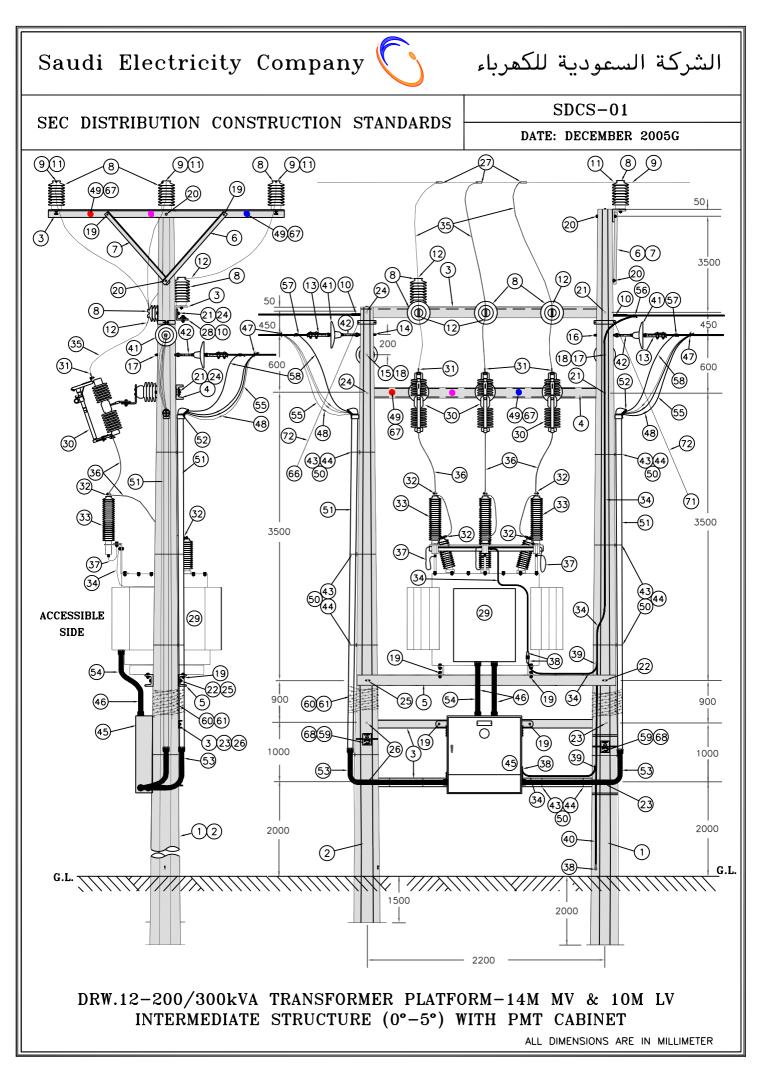
SDCS-01

DATE: DECEMBER 2005G

		DATE: DECEMBER 2005G			
SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION		REFERE	NCES
73	1	Pole Numbering Base Plate		20-SDMS-02	Fig. 51
74	1 Set	Pole Numbering Plates		20-SDMS-02	Fig. 51
75	1	Equipment Numbering Base Plate		20-SDMS-02	Fig. 52
76	1 Set	Equipment Numbering Plates		20-SDMS-02	Fig. 52
77	16	Terminal Lugs for Cable 4X300mm2 Al.		12-SDMS-02	Fig. 4
78	12	Terminal Lugs for Quadruplex Cable 4X120mm2 Al.		12-SDMS-02	Fig. 4
	<u> </u>				

DRW.11B3/3-300kVA TRANSFORMER PLATFORM-13M MV & 10M LV TERMINAL STRUCTURE WITH STAYS & PMT CABINET

# Saudi Electricity Company الشركة السعودية للكهرباء SDCS-01 SEC DISTRIBUTION CONSTRUCTION STANDARDS DATE: DECEMBER 2005G 200/300kVA PMT ON 14M POLE H-FRAME TRANSFORMER STRUCTURE





## الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFEREN	ICES
01	1	OC14S-14 Meter Steel Pole, HDG, Single Circuit	20-SDMS-01	Page 36
02	1	OC10-10 Meter Steel Pole, HDG, LV Single Circuit	20-SDMS-01	Page 33
03	4	Crossarm-L 100x100x12x2400mm L.G.	20-SDMS-02	Fig. 1
04	1	Fuse Cut—Out Mounting Channel—C 125x65x65x6x2400mm L.G.	20-SDMS-02	Fig. 2
05	2	Transformer Mounting Channel—C 150x75x75x6.5x2400mm L.G.	20-SDMS-02	Fig. 3
06	1	Brace-L 50x50x4x828mm L.G.	20-SDMS-02	Fig. 4
07	1	Brace-L 50x50x4x828mm L.G. With One End Clipped	20-SDMS-02	Fig. 4
08	7	Line Post Insulator	15-SDMS-01	Clause 4.2.8
09	3 Set	Preformed Armour Rods for 170.5mm2 ACSR/AW (Merlin)	20-SDMS-02	Fig. 38
10	2 Set	Preformed Armour Rod for 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 38
11	3 Set	Preformed Line Post Insulator Top Tie for Merlin ACSR With Armour	20-SDMS-02	Fig. 35
12	4 Set	Preformed Line Post Insulator Top Tie for Quail	20-SDMS-02	Fig. 35
13	4	Strain Clamp, Straight Line Deadend Type for Quadruplex	20-SDMS-02	Fig. 30
14	1	Shoulder Eye Bolt, M16x155mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
15	1	Shoulder Eye Bolt, M16x180mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
16	1	Shoulder Eye Bolt, M16x275mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
17	1	Shoulder Eye Bolt, M16x310mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
18	2	Eye Nut, M16	20-SDMS-02	Fig. 18
19	10	Machine Bolt, M20x60mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 14
20	2	Machine Bolt, M20x225mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
21	2	Machine Bolt, M20x285mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
22	1	Machine Bolt, M20x365mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
23	2	Machine Bolt, M20x400mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
24	2	Machine Bolt, M16x165mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
25	1	Machine Bolt, M16x275mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
26	2	Machine Bolt, M16x300mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
27	3	Parallel Groove Compression Connector for Merlin — Quail	20-SDMS-02	Fig. 39
28	2	Earthwire Support Plate, L 110x110x10x150mm L.G.	20-SDMS-02	Fig. 6
29	1	Transformer, 200KVA.	51-SDMS-01	
30	3	Fuse Cut-Out (Complete Assembly)	34-SDMS-01	
31	3	Terminal Plug For 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 42
32	9	Terminal Lug for 35mm2 Cu.	12-SDMS-02	
33	3	Surge Arrester, 33kV	35-SDMS-01	
34	15M	70mm2 Copper Bare Conductor		
35	21M	Quail Conductor, 67.44mm2 ACSR/AW	10-SDMS-01	
36	9М	Cu. Conductor, Insulated stranded 35mm2 Soft Drawn	11-SDMS-01	
37	3	35mm2 Cu. Flexible Cored Wire with Lugs	20-SDMS-02	

DRW.12A1/2-200kVA TRANSFORMER PLATFORM, 14M MV & 10M LV INTERMEDIATE STRUCTURE (0°-5°) WITH PMT CABINET



## الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFERE	NCES
38	13	Terminal Lugs for 70mm2, Cu.	12-SDMS-01	
39	2	Crimpit Cu. Connector For 70mm2.	20-SDMS-02	Fig. 45
40	1	Ground Wire Guard	20-SDMS-02	Fig. 47
41	4	Suspension Insulator	15-SDMS-01	Clause 4.2.5
42	4	Clevis Eye Extension	20-SDMS-02	Fig. 21
43	15M	Stainless Steel Strap Band	20-SDMS-02	Fig. 55
44	20	Buckle for Stainless Steel Strap Band	20-SDMS-02	Fig. 55
45	1	P.M.T. Cabinet 800A.	31-SDMS-03	
46	6М	Cable Aluminium— 4x300mm2 Main Incoming	11-SDMS-01	
47	4	Cable Tie	20-SDMS-02	Fig. 63
48	12	Insulated Type Sleeve for Connecting Quadruplex 120mm2—120mm2	20-SDMS-02	Fig. 34
49	2 Set	Phasing Plates (A,B,C).	20-SDMS-02	Fig. 53
50	6M	Rigid PVC Sleeve for Stainless Steel Strap	20-SDMS-02	Fig. 55
51	4	Polyethelene Rigid Pipe, 3Mtrs. 70mm O.D. 3mm Thickness	20-SDMS-02	
52	4	Weather Head, Al. for 70mm O.D. Polyethelene Rigid Pipe	20-SDMS-02	
53	4	Flexible Pipe, 2.5 Mtrs., 70mm O.D. Polyethelene Rigid Pipe for Outgoing Cable.	20-SDMS-02	
54	2	Flexible Pipe, 2 Mtrs., 75mm I.D for 4x300mm2 Incoming Cable.	20-SDMS-02	
55	36M	Quadruplex Cable, Al. 120mm2	11-SDMS-02	
56	1	Bi-Metalic connector, 2Bolts type for 70mm2 Cu70mm2 Al.	20-SDMS-02	
57	4	Bi-Metalic connector, 2Bolts type for 70mm2 Cu120mm2 Al.	20-SDMS-02	
58	36M	Cu. Conductor, Insulated stranded 70mm2 Soft Drawn		
59	2 Set	Danger Sign Plate Complete With Its Accessories	20-SDMS-02	Fig. 49
60	29M	Anti-Climbing Divice, Barbed Wire	20-SDMS-02	Fig. 13
61	4	Buckle Type, Locking Clip for Barbed Wire	20-SDMS-02	Fig. 13
62	1	Pole Numbering Base Plate	20-SDMS-02	Fig. 51
63	1 Set	Pole Numbering Plates	20-SDMS-02	Fig. 51
64	1	Equipment Numbering Base Plate	20-SDMS-02	Fig. 52
65	1 Set	Equipment Numbering Plates	20-SDMS-02	Fig. 52
66	1 Set	L.T One Stay Assembly (Optional)	SDCS-01	Drw. 310
67	6	Phasing Plates Mounting Brackets	20-SDMS-02	Fig. 54
68	2 Set	Danger Sign Mounting Brackets	20-SDMS-02	Fig. 50
69	16	Terminal Lugs for Cable 4X300mm2 Al.	12-SDMS-02	Fig. 4
70	12	Terminal Lugs for Quadruplex Cable 4X120mm2 Al.	12-SDMS-02	Fig. 4
71	1 Set	L.T One Stay Assembly On PMT— Structure/200	SDCS-01	Drw. 321
72	28M	Stay wire 7/3.25, 9.8mm Dia., HDG steel. UTS 65kN Min. (Optional)	SDCS-01	

DRW.12A2/2-200kVA TRANSFORMER PLATFORM, 14M MV & 10M LV INTERMEDIATE STRUCTURE (0°-5°) WITH PMT CABINET



# الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFEREN	ICES
01	1	OC14S-14 Meter Steel Pole, HDG, Single Circuit	20-SDMS-01	Page 36
02	1	OC10-10 Meter Steel Pole, HDG, LV Single Circuit	20-SDMS-01	Page 33
03	4	Crossarm-L 100x100x12x2400mm L.G.	20-SDMS-02	Fig. 1
04	1	Fuse Cut—Out Mounting Channel—C 125x65x65x6x2400mm L.G.	20-SDMS-02	Fig. 2
05	2	Transformer Mounting Channel—C 150x75x75x6.5x2400mm L.G.	20-SDMS-02	Fig. 3
06	1	Brace-L 50x50x4x828mm L.G.	20-SDMS-02	Fig. 4
07	1	Brace-L 50x50x4x828mm L.G. With One End Clipped	20-SDMS-02	Fig. 4
08	7	Line Post Insulator	15-SDMS-01	Clause 4.2.8
09	3 Set	Preformed Armour Rods for 170.5mm2 ACSR/AW (Merlin)	20-SDMS-02	Fig. 38
10	2 Set	Preformed Armour Rod for 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 38
11	3 Set	Preformed Line Post Insulator Top Tie for Merlin ACSR With Armour	20-SDMS-02	Fig. 35
12	4 Set	Preformed Line Post Insulator Top Tie for Quail	20-SDMS-02	Fig. 35
13	4	Strain Clamp, Straight Line Deadend Type for Quadruplex	20-SDMS-02	Fig. 30
14	1	Shoulder Eye Bolt, M16x155mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
15	1	Shoulder Eye Bolt, M16x180mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
16	1	Shoulder Eye Bolt, M16x275mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
17	1	Shoulder Eye Bolt, M16x310mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
18	2	Eye Nut, M16	20-SDMS-02	Fig. 18
19	10	Machine Bolt, M20x60mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 14
20	2	Machine Bolt, M20x225mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
21	2	Machine Bolt, M20x285mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
22	1	Machine Bolt, M20x365mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
23	2	Machine Bolt, M20x400mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
24	2	Machine Bolt, M16x165mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
25	1	Machine Bolt, M16x275mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
26	2	Machine Bolt, M16x300mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
27	3	Parallel Groove Compression Connector for Merlin — Quail	20-SDMS-02	Fig. 39
28	2	Earthwire Support Plate, L 110x110x10x150mm L.G.	20-SDMS-02	Fig. 6
29	1	Transformer, 300KVA.	51-SDMS-01	
30	3	Fuse Cut-Out (Complete Assembly)	34-SDMS-01	
31	3	Terminal Plug For 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 42
32	9	Terminal Lug for 35mm2 Cu.	12-SDMS-02	
33	3	Surge Arrester, 33kV	35-SDMS-01	
34	15M	70mm2 Copper Bare Conductor		
35	21M	Quail Conductor, 67.44mm2 ACSR/AW	10-SDMS-01	
36	9М	Cu. Conductor, Insulated stranded 35mm2 Soft Drawn	11-SDMS-01	
37	3	35mm2 Cu. Flexible Cored Wire with Lugs	20-SDMS-02	

DRW.12B1/2-300kVA TRANSFORMER PLATFORM, 14M MV & 10M LV INTERMEDIATE STRUCTURE (0°-5°) WITH PMT CABINET



## الشركة السعودية للكهرباء

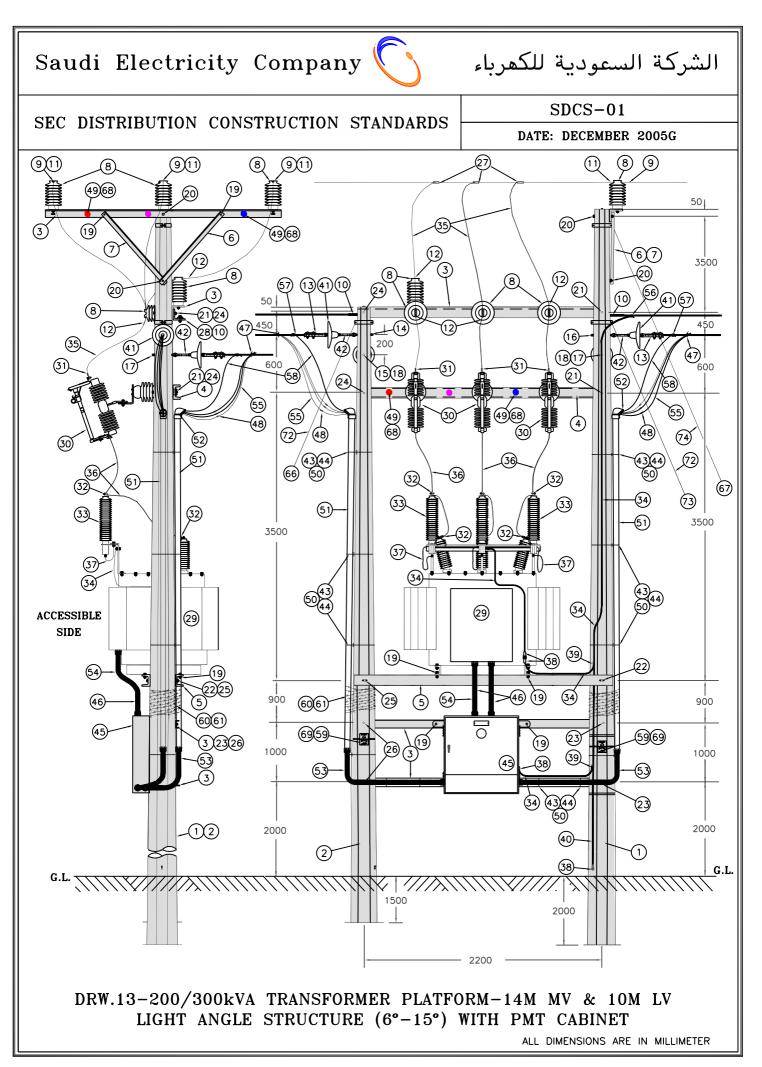
#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFERE	NCES
38	13	Terminal Lugs for 70mm2, Cu.	12-SDMS-01	
39	2	Crimpit Cu. Connector For 70mm2.	20-SDMS-02	Fig. 45
40	1	Ground Wire Guard	20-SDMS-02	Fig. 47
41	4	Suspension Insulator	15-SDMS-01	Clause 4.2.5
42	4	Clevis Eye Extension	20-SDMS-02	Fig. 21
43	15M	Stainless Steel Strap Band	20-SDMS-02	Fig. 55
44	20	Buckle for Stainless Steel Strap Band	20-SDMS-02	Fig. 55
45	1	P.M.T. Cabinet 800A.	31-SDMS-03	
46	6М	Cable Aluminium— 4x300mm2 Main Incoming	11-SDMS-01	
47	4	Cable Tie	20-SDMS-02	Fig. 63
48	12	Insulated Type Sleeve for Connecting Quadruplex 120mm2-120mm2	20-SDMS-02	Fig. 34
49	2 Set	Phasing Plates (A,B,C).	20-SDMS-02	Fig. 53
50	6М	Rigid PVC Sleeve for Stainless Steel Strap	20-SDMS-02	Fig. 55
51	4	Polyethelene Rigid Pipe, 3Mtrs. 70mm O.D. 3mm Thickness	20-SDMS-02	
52	4	Weather Head, Al. for 70mm O.D. Polyethelene Rigid Pipe	20-SDMS-02	
53	4	Flexible Pipe, 2.5 Mtrs., 70mm O.D. Polyethelene Rigid Pipe for Outgoing Cable.	20-SDMS-02	
54	2	Flexible Pipe, 2 Mtrs., 75mm I.D for 4x300mm2 Incoming Cable.	20-SDMS-02	
55	36M	Quadruplex Cable, Al., 120mm2	11-SDMS-02	
56	1	Bi-Metalic connector, 2Bolts type for 70mm2 Cu70mm2 Al.	20-SDMS-02	
57	4	Bi-Metalic connector, 2Bolts type for 70mm2 Cu120mm2 Al.	20-SDMS-02	
58	36M	Cu. Conductor, Insulated stranded 70mm2 Soft Drawn		
59	2 Set	Danger Sign Plate Complete With Its Accessories	20-SDMS-02	Fig. 49
60	29M	Anti-Climbing Divice, Barbed Wire	20-SDMS-02	Fig. 13
61	4	Buckle Type, Locking Clip for Barbed Wire	20-SDMS-02	Fig. 13
62	1	Pole Numbering Base Plate	20-SDMS-02	Fig. 51
63	1 Set	Pole Numbering Plates	20-SDMS-02	Fig. 51
64	1	Equipment Numbering Base Plate	20-SDMS-02	Fig. 52
65	1 Set	Equipment Numbering Plates	20-SDMS-02	Fig. 52
66	1 Set	L.T One Stay Assembly (Optional)	SDCS-01	Drw. 310
67	6	Phasing Plates Mounting Brackets	20-SDMS-02	Fig. 54
68	2 Set	Danger Sign Mounting Brackets	20-SDMS-02	Fig. 50
69	16	Terminal Lugs for Cable 4X300mm2 Al.	12-SDMS-02	Fig. 4
70	12	Terminal Lugs for Quadruplex Cable 4X120mm2 Al.	12-SDMS-02	Fig. 4
71	1 Set	L.T One Stay Assembly On PMT-Structure/200	SDCS-01	Drw. 321
72	28M	Stay wire 7/3.25, 9.8mm Dia, HDG steel, UTS 65kN Min. (Optional)	SDCS-01	

DRW.12B2/2-300kVA TRANSFORMER PLATFORM, 14M MV & 10M LV INTERMEDIATE STRUCTURE (0°-5°) WITH PMT CABINET





# الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFEREN	ICES
01	1	OC14S-14 Meter Steel Pole, HDG, Single Circuit	20-SDMS-01	Page 36
02	1	OC10-10 Meter Steel Pole, HDG, LV Single Circuit	20-SDMS-01	Page 33
03	4	Crossarm-L 100x100x12x2400mm L.G.	20-SDMS-02	Fig. 1
04	1	Fuse Cut—Out Mounting Channel—C 125x65x65x6x2400mm L.G.	20-SDMS-02	Fig. 2
05	2	Transformer Mounting Channel—C 150x75x75x6.5x2400mm L.G.	20-SDMS-02	Fig. 3
06	1	Brace-L 50x50x4x828mm L.G.	20-SDMS-02	Fig. 4
07	1	Brace-L 50x50x4x828mm L.G. With One End Clipped	20-SDMS-02	Fig. 4
08	7	Line Post Insulator	15-SDMS-01	Clause 4.2.8
09	3 Set	Preformed Armour Rods for 170.5mm2 ACSR/AW (Merlin)	20-SDMS-02	Fig. 38
10	2 Set	Preformed Armour Rod for 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 38
11	3 Set	Preformed Line Post Insulator Side Tie for Merlin ACSR With Armour	20-SDMS-02	Fig. 35
12	4 Set	Preformed Line Post Insulator Top Tie for Quail	20-SDMS-02	Fig. 35
13	4	Strain Clamp, Straight Line Deadend Type for Quadruplex	20-SDMS-02	Fig. 30
14	1	Shoulder Eye Bolt, M16x155mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
15	1	Shoulder Eye Bolt, M16x180mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
16	1	Shoulder Eye Bolt, M16x275mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
17	1	Shoulder Eye Bolt, M16x310mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
18	2	Eye Nut, M16	20-SDMS-02	Fig. 18
19	10	Machine Bolt, M20x60mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 14
20	2	Machine Bolt, M20x225mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
21	2	Machine Bolt, M20x285mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
22	1	Machine Bolt, M20x365mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
23	2	Machine Bolt, M20x400mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
24	2	Machine Bolt, M16x165mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
25	1	Machine Bolt, M16x275mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
26	2	Machine Bolt, M16x300mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
27	3	Parallel Groove Compression Connector for Merlin — Quail	20-SDMS-02	Fig. 39
28	2	Earthwire Support Plate, L 110x110x10x150mm Lg.	20-SDMS-02	Fig. 6
29	1	Transformer, 200KVA.	51-SDMS-01	
30	3	Fuse Cut-Out (Complete Assembly)	34-SDMS-01	
31	3	Terminal Plug For 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 42
32	9	Terminal Lug for 35mm2 Cu.	12-SDMS-02	
33	3	Surge Arrester, 33kV	35-SDMS-01	
34	15M	70mm2 Copper Bare Conductor		
35	21M	Quail Conductor, 67.44mm2 ACSR/AW	10-SDMS-01	
36	9М	Cu. Conductor, Insulated stranded 35mm2 Soft Drawn	11-SDMS-01	
37	3	35mm2 Cu. Flexible Cored Wire with Lugs	20-SDMS-02	

DRW.13A1/2-200kVA TRANSFORMER PLATFORM, 14M MV & 10M LV LIGHT ANGLE STRUCTURE (6°-15°) WITH PMT CABINET



## الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFERENCES	
38	13	Terminal Lugs for 70mm2, Cu.	12-SDMS-01	
39	2	Crimpit Cu. Connector For 70mm2.	20-SDMS-02	Fig. 45
40	1	Ground Wire Guard	20-SDMS-02	Fig. 47
41	4	Suspension Insulator	15-SDMS-01	Clause 4.2.5
42	4	Clevis Eye Extension	20-SDMS-02	Fig. 21
43	15M	Stainless Steel Strap Band	20-SDMS-02	Fig. 55
44	20	Buckle for Stainless Steel Strap Band	20-SDMS-02	Fig. 55
45	1	P.M.T. Cabinet 800A.	31-SDMS-03	
46	6М	Cable Aluminium— 4x300mm2 Main Incoming	11-SDMS-01	
47	4	Cable Tie	20-SDMS-02	Fig. 63
48	12	Insulated Type Sleeve for Connecting Quadruplex 120mm2—120mm2	20-SDMS-02	Fig. 34
49	2 Set	Phasing Plates (A,B,C).	20-SDMS-02	Fig. 53
50	6M	Rigid PVC Sleeve for Stainless Steel Strap	20-SDMS-02	Fig. 55
51	4	Polyethelene Rigid Pipe, 3Mtrs. 70mm O.D. 3mm Thickness	20-SDMS-02	
52	4	Weather Head, Al. for 70mm O.D. Polyethelene Rigid Pipe	20-SDMS-02	
53	4	Flexible Pipe, 2.5 Mtrs., 70mm O.D. Polyethelene Rigid Pipe for Outgoing Cable.	20-SDMS-02	
54	2	Flexible Pipe, 2 Mtrs., 75mm I.D for 4x300mm2 Incoming Cable.	20-SDMS-02	
55	36M	Quadruplex Cable, Al. 120mm2	11-SDMS-02	
56	1	Bi-Metalic connector, 2Bolts type for 70mm2 Cu70mm2 Al.	20-SDMS-02	
57	4	Bi-Metalic connector, 2Bolts type for 70mm2 Cu120mm2 Al.	20-SDMS-02	
58	36M	Cu. Conductor, Insulated stranded 70mm2 Soft Drawn		
59	2 Set	Danger Sign Plate Complete With Its Accessories	20-SDMS-02	Fig. 49
60	29M	Anti-Climbing Divice, Barbed Wire	20-SDMS-02	Fig. 13
61	4	Buckle Type, Locking Clip for Barbed Wire	20-SDMS-02	Fig. 13
62	1	Pole Numbering Base Plate	20-SDMS-02	Fig. 51
63	1 Set	Pole Numbering Plates	20-SDMS-02	Fig. 51
64	1	Equipment Numbering Base Plate	20-SDMS-02	Fig. 52
65	1 Set	Equipment Numbering Plates	20-SDMS-02	Fig. 52
66	1 Set	L.T One Stay Assembly (Optional)	SDCS-01	Drw. 310
67	1 Set	M.V-S.C One Stay Assembly	SDCS-01	Drw. 312
68	6	Phasing Plates Mounting Brackets	20-SDMS-02	Fig. 54
69	2 Set	Danger Sign Mounting Brackets	20-SDMS-02	Fig. 50
70	16	Terminal Lugs for Cable 4X300mm2 Al.	12-SDMS-02	Fig. 4
71	12	Terminal Lugs for Quadruplex Cable 4X120mm2 Al.	12-SDMS-02	Fig. 4
72	28M	Stay wire 7/3.25, 9.8mm Dia, HDG steel, UTS 65kN Min. (Optional)	SDCS-01	
73	1 Set	L.T One Stay Assembly On PMT-Structure/200	SDCS-01	Drw. 321
74	17M	Stay wire 7/4, 12mm Dia, HDG steel, UTS 101kN (Min.)	SDCS-01	

DRW.13A2/2-200kVA TRANSFORMER PLATFORM, 14M MV & 10M LV LIGHT ANGLE STRUCTURE (6°-15°) WITH PMT CABINET



## الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFEREN	1CES
01	1	OC14S-14 Meter Steel Pole, HDG, Single Circuit	20-SDMS-01	Page 36
02	1	OC10-10 Meter Steel Pole, HDG, LV Single Circuit	20-SDMS-01	Page 33
03	4	Crossarm-L 100x100x12x2400mm L.G.	20-SDMS-02	Fig. 1
04	1	Fuse Cut-Out Mounting Channel-C 125x65x65x6x2400mm L.G.	20-SDMS-02	Fig. 2
05	2	Transformer Mounting Channel—C 150x75x75x6.5x2400mm L.G.	20-SDMS-02	Fig. 3
06	1	Brace-L 50x50x4x828mm L.G.	20-SDMS-02	Fig. 4
07	1	Brace-L 50x50x4x828mm L.G. With One End Clipped	20-SDMS-02	Fig. 4
08	7	Line Post Insulator	15-SDMS-01	Clause 4.2.8
09	3 Set	Preformed Armour Rods for 170.5mm2 ACSR/AW (Merlin)	20-SDMS-02	Fig. 38
10	2 Set	Preformed Armour Rod for 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 38
11	3 Set	Preformed Line Post Insulator Side Tie for Merlin ACSR With Armour	20-SDMS-02	Fig. 35
12	4 Set	Preformed Line Post Insulator Top Tie for Quail	20-SDMS-02	Fig. 35
13	4	Strain Clamp, Straight Line Deadend Type for Quadruplex	20-SDMS-02	Fig. 30
14	1	Shoulder Eye Bolt, M16x155mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
15	1	Shoulder Eye Bolt, M16x180mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
16	1	Shoulder Eye Bolt, M16x275mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
17	1	Shoulder Eye Bolt, M16x310mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
18	2	Eye Nut, M16	20-SDMS-02	Fig. 16
19	10	Machine Bolt, M20x60mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 14
20	2	Machine Bolt, M20x225mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
21	2	Machine Bolt, M20x285mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
22	1	Machine Bolt, M20x365mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
23	2	Machine Bolt, M20x400mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
24	2	Machine Bolt, M16x165mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
25	1	Machine Bolt, M16x275mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
26	2	Machine Bolt, M16x300mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
27	3	Parallel Groove Compression Connector for Merlin — Quail	20-SDMS-02	Fig. 39
28	2	Earthwire Support Plate, L 110x110x10x150mm Lg.	20-SDMS-02	Fig. 6
29	1	Transformer, 300KVA.	51-SDMS-01	
30	3	Fuse Cut-Out (Complete Assembly)	34-SDMS-01	
31	3	Terminal Plug For 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 42
32	9	Terminal Lug for 35mm2 Cu.	12-SDMS-02	
33	3	Surge Arrester, 33kV	35-SDMS-01	
34	15M	70mm2 Copper Bare Conductor		
35	21M	Quail Conductor, 67.44mm2 ACSR/AW	10-SDMS-01	
36	9М	Cu. Conductor, Insulated stranded 35mm2 Soft Drawn	11-SDMS-01	
37	3	35mm2 Cu. Flexible Cored Wire with Lugs	20-SDMS-02	

DRW.13B1/2-300kVA TRANSFORMER PLATFORM, 14M MV & 10M LV LIGHT ANGLE STRUCTURE (6°-15°) WITH PMT CABINET



## الشركة السعودية للكهرباء

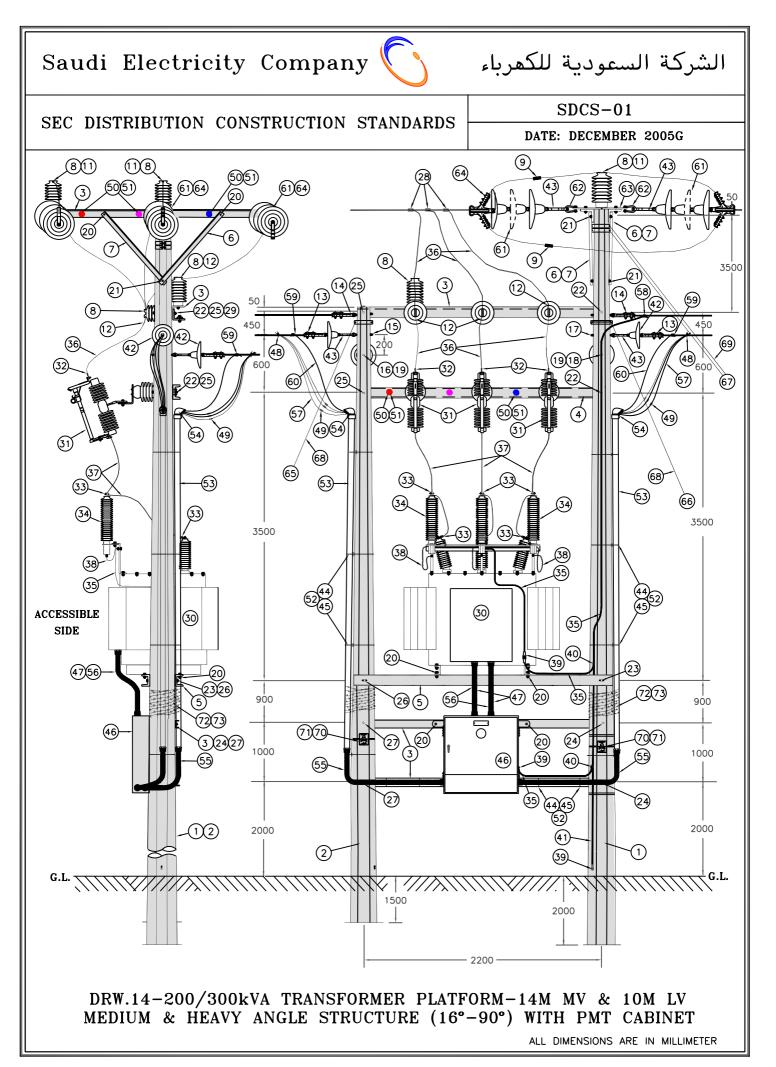
#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFERE	NCES
38	13	Terminal Lugs for 70mm2, Cu.	12-SDMS-01	
39	2	Crimpit Cu. Connector For 70mm2.	20-SDMS-02	Fig. 45
40	1	Ground Wire Guard	20-SDMS-02	Fig. 47
41	4	Suspension Insulator	15-SDMS-01	Clause 4.2.5
42	4	Clevis Eye Extension	20-SDMS-02	Fig. 21
43	15M	Stainless Steel Strap Band	20-SDMS-02	Fig. 55
44	20	Buckle for Stainless Steel Strap Band	20-SDMS-02	Fig. 55
45	1	P.M.T. Cabinet 800A.	31-SDMS-03	
46	6М	Cable Aluminium- 4x300mm2 Main Incoming	11-SDMS-01	
47	4	Cable Tie	20-SDMS-02	Fig. 63
48	12	Insulated Type Sleeve for Connecting Quadruplex 120mm2—120mm2	20-SDMS-02	Fig. 34
49	2 Set	Phasing Plates (A,B,C).	20-SDMS-02	Fig. 53
50	6M	Rigid PVC Sleeve for Stainless Steel Strap	20-SDMS-02	Fig. 55
51	4	Polyethelene Rigid Pipe, 3Mtrs. 70mm O.D. 3mm Thickness	20-SDMS-02	
52	4	Weather Head, Al. for 70mm O.D. Polyethelene Rigid Pipe	20-SDMS-02	
53	4	Flexible Pipe, 2.5 Mtrs. 70mm O.D. Polyethelene Rigid Pipe for Outgoing Cable	20-SDMS-02	
54	2	Flexible Pipe, 2 Mtr. 75mm I.D for 4x300mm2 Incoming Cable	20-SDMS-02	
55	36M	Quadruplex Cable, Al. 120mm2	11-SDMS-02	
56	1	Bi-Metalic connector, 2Bolts type for 70mm2 Cu70mm2 Al.	20-SDMS-02	
57	4	Bi-Metalic connector, 2Bolts type for 70mm2 Cu120mm2 Al.	20-SDMS-02	
58	36M	Cu. Conductor, Insulated stranded 70mm2 Soft Drawn		
59	2 Set	Danger Sign Plate Complete With Its Accessories	11-SDMS-01	Fig. 49
60	29M	Anti-Climbing Divice, Barbed Wire	20-SDMS-02	Fig. 13
61	4	Buckle Type, Locking Clip for Barbed Wire	20-SDMS-02	Fig. 13
62	1	Pole Numbering Base Plate	20-SDMS-02	Fig. 51
63	1 Set	Pole Numbering Plates	20-SDMS-02	Fig. 51
64	1	Equipment Numbering Base Plate	20-SDMS-02	Fig. 52
65	1 Set	Equipment Numbering Plates	20-SDMS-02	Fig. 52
66	1 Set	L.T One Stay Assembly (Optional)	SDCS-01	Drw. 310
67	1 Set	M.V-S.C One Stay Assembly	SDCS-01	Drw. 312
68	6	Phasing Plates Mounting Brackets	20-SDMS-02	Fig. 54
69	2 Set	Danger Sign Mounting Brackets	20-SDMS-02	Fig. 50
70	16	Terminal Lugs for Cable 4X300mm2 Al.	12-SDMS-02	Fig. 4
71	12	Terminal Lugs for Quadruplex Cable 4X120mm2 Al.	12-SDMS-02	Fig. 4
72	28M	Stay wire 7/3.25, 9.8mm Dia, HDG steel, UTS 65kN Min. (Optional)	SDCS-01	
73	1 Set	L.T One Stay Assembly On PMT-Structure/200	SDCS-01	Drw. 321
74	17M	Stay wire 7/4, 12mm Dia, HDG steel, UTS 101kN (Min.)	SDCS-01	

DRW.13B2/2-300kVA TRANSFORMER PLATFORM, 14M MV & 10M LV LIGHT ANGLE STRUCTURE (6°-15°) WITH PMT CABINET





## الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFEREN	ICES
01	1	OC14S-14 Meter Steel Pole, HDG, Single Circuit	20-SDMS-01	Page 36
02	1	OC10-10 Meter Steel Pole, HDG, LV Single Circuit	20-SDMS-01	Page 33
03	5	Crossarm-L 100x100x12x2400mm L.G.	20-SDMS-02	Fig. 1
04	1	Fuse Cut—Out Mounting Channel—C 125x65x65x6x2400mm L.G.	20-SDMS-02	Fig. 2
05	2	Transformer Mounting Channel—C 150x75x75x6.5x2400mm L.G.	20-SDMS-02	Fig. 3
06	2	Brace-L 50x50x4x828mm L.G.	20-SDMS-02	Fig. 4
07	2	Brace-L 50x50x4x828mm L.G. With One End Clipped	20-SDMS-02	Fig. 4
08	6	Line Post Insulator	15-SDMS-01	Clause 4.2.8
09	3	Parallel Groove Compression Connecter for 170.5mm2 ACSR/AW (Merlin-Merlin)	20-SDMS-02	Fig. 39
10	1	Parallel Groove Compression Connecter for 67.44mm2 ACSR/AW (Quail—Quail)	20-SDMS-02	Fig. 39
11	2 Set	Preformed Line Post Insulator Top Tie for Merlin ACSR	20-SDMS-02	Fig. 35
12	4 Set	Preformed Line Post Insulator Top Tie for Quail	20-SDMS-02	Fig. 35
13	4	Strain Clamp, Straight Line Deadend Type for Quadruplex	20-SDMS-02	Fig. 30
14	2	Strain Clamp, Straight Line Deadend Type for Quail ACSR	20-SDMS-02	Fig. 30
15	1	Shoulder Eye Bolt, M16x155mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
16	1	Shoulder Eye Bolt, M16x180mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
17	1	Shoulder Eye Bolt, M16x275mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
18	1	Shoulder Eye Bolt, M16x310mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
19	2	Eye Nut, M16	20-SDMS-02	Fig. 16
20	18	Machine Bolt, M20x60mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 14
21	2	Machine Bolt, M20x225mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
22	2	Machine Bolt, M20x285mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
23	1	Machine Bolt, M20x365mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
24	2	Machine Bolt, M20x400mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
25	2	Machine Bolt, M16x165mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
26	1	Machine Bolt, M16x275mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
27	2	Machine Bolt, M16x300mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
28	3	Parallel Groove Compression Connector for Merlin — Quail	20-SDMS-02	Fig. 39
29	2	Earthwire Suspension Support, L 110x110x10x150mm Lg.	20-SDMS-02	Fig. 5
30	1	Transformer, 200KVA.	51-SDMS-01	
31	3	Fuse Cut-Out (Complete Assembly)	34-SDMS-01	
32	3	Terminal Plug For 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 42
33	9	Terminal Lug for 35mm2 Cu.	12-SDMS-02	
34	3	Surge Arrester, 33kV	35-SDMS-01	
35	15M	70mm2 Copper Bare Conductor		
36	21M	Quail Conductor, 67.44mm2 ACSR/AW	10-SDMS-01	
37	9М	Cu. Conductor, Insulated stranded 35mm2 Soft Drawn	11-SDMS-01	

DRW.14A1/3-200kVA TRANSFORMER PLATFORM, 14M MV & 10M LV MEDIUM & HEAVY ANGLE STRUCTURE (16°-90°) WITH PMT CABINET



## الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFERENCES	
38	3	35mm2 Cu. Flexible Cored Wire with Lugs	20-SDMS-02	
39	13	Terminal Lugs for 70mm2, Cu.	12-SDMS-01	
40	2	Crimpit Cu. Connector For 70mm2.	20-SDMS-02	Fig. 45
41	1	Ground Wire Guard	20-SDMS-02	Fig. 47
42	4	Suspension Insulator (Single)	15-SDMS-01	Page.23
43	10	Clevis Eye Extension	20-SDMS-02	Fig. 21
44	15M	Stainless Steel Strap Band	20-SDMS-02	Fig. 55
45	20	Buckle for Stainless Steel Strap Band	20-SDMS-02	Fig. 55
46	1	P.M.T. Cabinet 800A.	31-SDMS-03	
47	6М	Cable Aluminium— 4x300mm2 Main Incoming	11-SDMS-01	
48	4	Cable Tie	20-SDMS-02	Fig. 63
49	12	Insulated Type Sleeve for Connecting Quadruplex 120mm2-120mm2	20-SDMS-02	Fig. 34
50	2 Set	Phasing Plates (A,B,C).	20-SDMS-02	Fig. 53
51	6	Phasing Plates Mounting Brackets	20-SDMS-02	Fig. 54
52	6M	Rigid PVC Sleeve for Stainless Steel Strap	20-SDMS-02	Fig. 55
53	4	Polyethelene Rigid Pipe, 3Mtrs. 70mm O.D. 3mm Thickness		
54	4	Weather Head, Al. for 70mm O.D. PVC Rigid Pipe	20-SDMS-02	
55	4	Flexible Pipe, 2.5 Mtrs., 70mm O.D. PVC Rigid Pipe for Outgoing Cable.	20-SDMS-02	
56	2	Flexible Pipe, 2 Mtrs., 75mm I.D for 4x300mm2 Incoming Cable.	20-SDMS-02	
57	36M	Quadruplex Cable, 120mm2	11-SDMS-02	
58	1	Bi-Metalic connector, 2Bolts type for 70mm2 Cu70mm2 Al.	20-SDMS-02	
59	4	Bi-Metalic connector, 2Bolts type for 70mm2 Cu120mm2 Al.	20-SDMS-02	
60	36M	Cu. Conductor, Insulated stranded 70mm2 Soft Drawn	11-SDMS-01	
61	6 Set	Suspension Insulator	15-SDMS-01	Page. 23
62	6	Anchor Shackle	20-SDMS-02	Fig. 20
63	3	Double Arming Plate, 100x12x700mm Lg.	20-SDMS-02	Fig. 07
64	6	Strain Clamp, 3U-Bolts type for Merlin	20-SDMS-02	Fig. 29
65	1 Set	L.T One Stay Assembly (Optional)	SDCS-01	Drw. 310
66	1 Set	L.T One Stay Assembly On PMT-Structure/200	SDCS-01	Drw. 310
67	1 Set	M.V-S.C Two Stay Assembly	SDCS-01	Drw. 313
68	28M	Stay wire 7/3.25, 9.8mm Dia, HDG Steel UTS 65 Min. (Optional)	SDCS-01	
69	34M	Stay wire 7/4, 12mm Dia, HDG Steel UTS 101kN Min.	SDCS-01	
70	2 Set	Danger Sign Plate Complete With Its Accessories	20-SDMS-02	Fig. 49
71	2 Set	Danger Sign Mounting Brackets	20-SDMS-02	Fig. 50
72	29M	Anti-Climbing Divice, Barbed Wire	20-SDMS-02	Fig. 13
73	4	Buckle Type, Locking Clip for Barbed Wire	20-SDMS-02	Fig. 13

DRW.14A2/3-200kVA TRANSFORMER PLATFORM, 14M MV & 10M LV MEDIUM & HEAVY ANGLE STRUCTURE (16°-90°) WITH PMT CABINET



## الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

			DATE: DECEMBER 2003G		
SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION REFERENCE		ICES	
74	16	Terminal Lugs for Cable 4X300mm2 Al.		12-SDMS-02	Fig. 4
75	12	Terminal Lugs for Quadruplex Cable 4X120mm2 Al.		12-SDMS-02	Fig. 4
76	1	Pole Numbering Base Plate		20-SDMS-02	Fig. 51
77	1 Set	Pole Numbering Plates		20-SDMS-02	Fig. 51
78	1	Equipment Numbering Base Plate		20-SDMS-02	Fig. 52
79	1 Set	Equipment Numbering Plates		20-SDMS-02	Fig. 52

DRW.14A3/3-200kVA TRANSFORMER PLATFORM, 14M MV & 10M LV MEDIUM & HEAVY ANGLE STRUCTURE (16°-90°) WITH PMT CABINET



## الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFEREN	NCES
01	1	OC14S-14 Meter Steel Pole, HDG, Single Circuit	20-SDMS-01	Page 36
02	1	OC10-10 Meter Steel Pole, HDG, LV Single Circuit	20-SDMS-01	Page 33
03	5	Crossarm-L 100x100x12x2400mm L.G.	20-SDMS-02	Fig. 1
04	1	Fuse Cut—Out Mounting Channel—C 125x65x65x6x2400mm L.G.	20-SDMS-02	Fig. 2
05	2	Transformer Mounting Channel—C 150x75x75x6.5x2400mm L.G.	20-SDMS-02	Fig. 3
06	2	Brace-L 50x50x4x828mm L.G.	20-SDMS-02	Fig. 4
07	2	Brace-L 50x50x4x828mm L.G. With One End Clipped	20-SDMS-02	Fig. 4
08	6	Line Post Insulator	15-SDMS-01	Clause 4.2.8
09	3	Parallel Groove Compression Connecter for 170.5mm2 ACSR/AW (Merlin-Merlin)	20-SDMS-02	Fig. 39
10	1	Parallel Groove Compression Connecter for 67.44mm2 ACSR/AW (Quail-Quail)	20-SDMS-02	Fig. 39
11	2 Set	Preformed Line Post Insulator Top Tie for Merlin ACSR	20-SDMS-02	Fig. 35
12	4 Set	Preformed Line Post Insulator Top Tie for Quail	20-SDMS-02	Fig. 35
13	4	Strain Clamp, Straight Line Deadend Type for Quadruplex	20-SDMS-02	Fig. 30
14	2	Strain Clamp, Straight Line Deadend Type for Quail ACSR	20-SDMS-02	Fig. 16
15	1	Shoulder Eye Bolt, M16x155mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
16	1	Shoulder Eye Bolt, M16x180mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
17	1	Shoulder Eye Bolt, M16x275mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
18	1	Shoulder Eye Bolt, M16x310mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
19	2	Eye Nut, M16	20-SDMS-02	Fig. 16
20	18	Machine Bolt, M20x60mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 14
21	2	Machine Bolt, M20x225mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
22	2	Machine Bolt, M20x285mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
23	1	Machine Bolt, M20x365mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
24	2	Machine Bolt, M20x400mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
25	2	Machine Bolt, M16x165mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
26	1	Machine Bolt, M16x275mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
27	2	Machine Bolt, M16x300mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
28	3	Parallel Groove Compression Connector for Merlin — Quail	20-SDMS-02	Fig. 39
29	2	Earthwire Suspension Support, L 110x110x10x150mm Lg.	20-SDMS-02	Fig. 5
30	1	Transformer, 300KVA	51-SDMS-01	
31	3	Fuse Cut-Out (Complete Assembly)	34-SDMS-01	
32	3	Terminal Plug For 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 42
33	9	Terminal Lug for 35mm2 Cu.	20-SDMS-02	Fig. 46
34	3	Surge Arrester, 33kV	35-SDMS-01	
35	15M	70mm2 Copper Bare Conductor		
36	21M	Quail Conductor, 67.44mm2 ACSR/AW	10-SDMS-01	
37	9М	Cu. Conductor, Insulated stranded 35mm2 Soft Drawn	11-SDMS-01	

DRW.14B1/3-300kVA TRANSFORMER PLATFORM, 14M MV & 10M LV MEDIUM & HEAVY ANGLE STRUCTURE (16°-90°) WITH PMT CABINET



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#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFER	REFERENCES	
38	3	35mm2 Cu. Flexible Cored Wire with Lugs	20-SDMS-02		
39	13	Terminal Lugs for 70mm2, Cu.	12-SDMS-01		
40	2	Crimpit Cu. Connector For 70mm2.	20-SDMS-02	Fig. 45	
41	1	Ground Wire Guard	20-SDMS-02	Fig. 47	
42	4	Suspension Insulator (Single)	15-SDMS-01	Page.23	
43	10	Clevis Eye Extension	20-SDMS-02	Fig. 21	
44	15M	Stainless Steel Strap Band	20-SDMS-02	Fig. 55	
45	20	Buckle for Stainless Steel Strap Band	20-SDMS-02	Fig. 55	
46	1	P.M.T. Cabinet 800A.	31-SDMS-03		
47	6М	Cable Aluminium— 4x300mm2 Main Incoming	11-SDMS-01		
48	4	Cable Tie	20-SDMS-02	Fig. 63	
49	12	Insulated Type Sleeve for Connecting Quadruplex 120mm2	2-120mm2 20-SDMS-02	Fig. 34	
50	2 Set	Phasing Plates (A,B,C).	20-SDMS-02	Fig. 53	
51	6	Phasing Plates Mounting Brackets	20-SDMS-02	Fig. 54	
52	6M	Rigid PVC Sleeve for Stainless Steel Strap	20-SDMS-02	Fig. 55	
53	4	Polyethelene Rigid Pipe, 3Mtrs. 70mm O.D. 3mm Thicknes	ss		
54	4	Weather Head, Al. for 70mm O.D. PVC Rigid Pipe	20-SDMS-02		
55	4	Flexible Pipe, 2.5 Mtrs., 70mm O.D. PVC Rigid Pipe for (	Outgoing Cable. 20-SDMS-02		
56	2	Flexible Pipe, 2 Mtrs., 75mm I.D for 4x300mm2 Incoming	g Cable. 20-SDMS-02		
57	36M	Quadruplex Cable, 120mm2	11-SDMS-02		
58	1	Bi-Metalic connector, 2Bolts type for 70mm2 Cu70mm	22 AI. 20-SDMS-02		
59	4	Bi-Metalic connector, 2Bolts type for 70mm2 Cu120mm	m2 Al. 20-SDMS-02		
60	36M	Cu. Conductor, Insulated stranded 70mm2 Soft Drawn	11-SDMS-01		
61	6 Set	Suspension Insulator	15-SDMS-01	Page. 23	
62	6	Anchor Shackle	20-SDMS-02	Fig. 20	
63	3	Double Arming Plate, 100x12x700mm Lg.	20-SDMS-02	Fig. 07	
64	6	Strain Clamp, 3U-Bolts type for Merlin	20-SDMS-02	Fig. 29	
65	1 Set	L.T One Stay Assembly (Optional)	SDCS-01	Drw. 310	
66	1 Set	L.T One Stay Assembly On PMT-Structure/200	SDCS-01	Drw. 310	
67	1 Set	M.V-S.C Two Stay Assembly	SDCS-01	Drw. 313	
68	28M	Stay wire 7/3.25, 9.8mm Dia, HDG Steel UTS 65 Min. (C	Optional) SDCS-01		
69	34M	Stay wire 7/4, 12mm Dia, HDG Steel UTS 101kN Min.	SDCS-01		
70	2 Set	Danger Sign Plate Complete With Its Accessories	20-SDMS-02	Fig. 49	
71	2 Set	Danger Sign Mounting Brackets	20-SDMS-02	Fig. 50	
72	29M	Anti-Climbing Divice, Barbed Wire	20-SDMS-02	Fig. 13	
73	4	Buckle Type, Locking Clip for Barbed Wire	20-SDMS-02	Fig. 13	

DRW.14B2/3-300kVA TRANSFORMER PLATFORM, 14M MV & 10M LV MEDIUM & HEAVY ANGLE STRUCTURE (16°-90°) WITH PMT CABINET



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SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION REFERENCE		ICES		
74	16	Terminal Lugs for Cable 4X300mm2 Al.		12-SDMS-02	Fig. 4	
75	12	Terminal Lugs for Quadruplex Cable 4X120mm2 Al.		12-SDMS-02	Fig. 4	
76	1	Pole Numbering Base Plate		20-SDMS-02	Fig. 51	
77	1 Set	Pole Numbering Plates		20-SDMS-02	Fig. 51	
78	1	Equipment Numbering Base Plate		20-SDMS-02	Fig. 52	
79	1 Set	Equipment Numbering Plates		20-SDMS-02	Fig. 52	

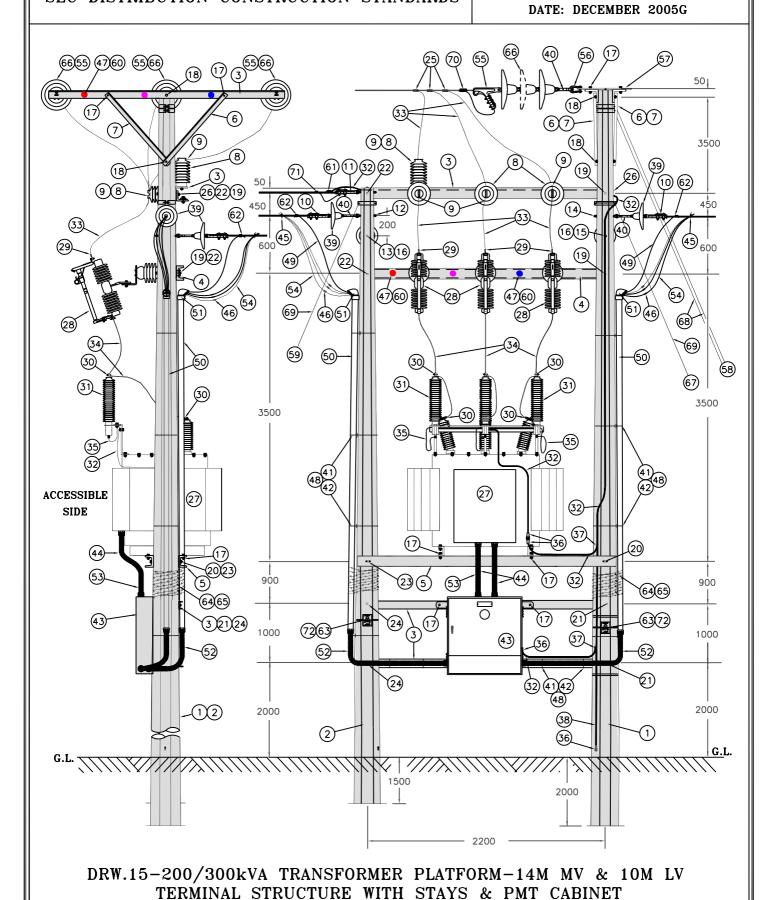
DRW.14B3/3-300kVA TRANSFORMER PLATFORM, 14M MV & 10M LV MEDIUM & HEAVY ANGLE STRUCTURE (16°-90°) WITH PMT CABINET



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DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFEREN	ICES
01	1	OC14S-14 Meter Steel Pole, HDG, Single Circuit	20-SDMS-01	Page 36
02	1	OC10-10 Meter Steel Pole, HDG, LV Single Circuit	20-SDMS-01	Page 33
03	5	Crossarm-L 100x100x12x2400mm L.G.	20-SDMS-02	Fig. 1
04	1	Fuse Cut-Out Mounting Channel-C 125x65x65x6x2400mm L.G.	20-SDMS-02	Fig. 2
05	2	Transformer Mounting Channel—C 150x75x75x6.5x2400mm L.G.	20-SDMS-02	Fig. 3
06	2	Brace-L 50x50x4x828mm L.G.	20-SDMS-02	Fig. 4
07	2	Brace-L 50x50x4x828mm L.G. With One End Clipped	20-SDMS-02	Fig. 4
08	4	Line Post Insulator	15-SDMS-01	Clause 4.2.8
09	4 Set	Preformed Line Post Insulator Top Tie for Quail	20-SDMS-02	Fig. 35
10	4	Strain Clamp, Straight Line Deadend Type for Quadruplex	20-SDMS-02	Fig. 30
11	1	Strain Clamp, Straight Line Deadend Type for Quail ACSR	20-SDMS-02	Fig. 30
12	1	Shoulder Eye Bolt, M16x155mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
13	1	Shoulder Eye Bolt, M16x180mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
14	1	Shoulder Eye Bolt, M16x275mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
15	1	Shoulder Eye Bolt, M16x310mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
16	2	Eye Nut M16	20-SDMS-02	Fig. 18
17	18	Machine Bolt, M20x60mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 14
18	2	Machine Bolt, M20x225mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
19	2	Machine Bolt, M20x285mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
20	1	Machine Bolt, M20x365mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
21	2	Machine Bolt, M20x400mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
22	2	Machine Bolt, M16x165mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
23	1	Machine Bolt, M16x275mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
24	2	Machine Bolt, M16x300mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
25	3	Parallel Groove Compression Connector for Merlin — Quail	20-SDMS-02	Fig. 39
26	2	Earthwire Suspension Support, L 110x110x10x150mm Lg.	20-SDMS-02	Fig. 5
27	1	Transformer, 200KVA.	51-SDMS-01	
28	3	Fuse Cut-Out (Complete Assembly)	34-SDMS-01	
29	3	Terminal Plug For 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 42
30	9	Terminal Lug for 35mm2 Cu.	20-SDMS-02	Fig. 46
31	3	Surge Arrester, 33kV	35-SDMS-01	
32	17M	70mm2 Copper Bare Conductor		
33	21M	Quail Conductor, 67.44mm2 ACSR/AW	10-SDMS-01	
34	9М	Cu. Conductor, Insulated Stranded 35mm2 Soft Drawn	11-SDMS-01	
35	3	35mm2 Cu. Flexible Cored Wire with Lugs	20-SDMS-02	
36	13	Terminal Lug for 70mm2 Cu.	12-SDMS-01	
37	2	Crimpit Cu. Connector for 70mm2	20-SDMS-02	Fig. 45

DRW.15A1/3-200kVA TRANSFORMER PLATFORM-14M MV & 10M LV TERMINAL STRUCTURE WITH STAYS & PMT CABINET



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#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFEREN	ICES
38	1	Ground Wire Guard	20-SDMS-02	Fig. 47
39	4	Suspension Insulator (Single)	15-SDMS-01	
40	7	Clevis Eye Extension	20-SDMS-02	Fig. 21
41	15M	Stainless Steel Strap Band	20-SDMS-02	Fig. 55
42	20	Buckle for Stainless Steel Strap Band	20-SDMS-02	Fig. 55
43	1	P.M.T. Cabinet 800A	31-SDMS-03	
44	6М	Cable — 4x300mm2 Al. Main Incoming	11-SDMS-01	
45	4	Cable Tie	20-SDMS-02	Fig. 63
46	12	Insulated Type Sleeve for Connecting Quadruplex 120mm2—120mm2	20-SDMS-02	Fig. 34
47	2 Set	Phasing Plates (A,B,C)	20-SDMS-02	Fig. 53
48	6М	Rigid PVC Sleeve for Stainless Steel Strap	20-SDMS-02	Fig. 55
49	36M	Cu. Conductor Insulated, stranded 70mm2 Soft Drawn	11-SDMS-01	
50	4	Polyethelene Rigid Pipe, 3Mtrs. 70mm O.D. 3mm Thickness		
51	4	Weather Head, Al. for 70mm O.D. PVC Rigid Pipe	20-SDMS-02	
52	4	Flexible Pipe, 2.5 Mtrs. 70mm O.D. PVC Rigid Pipe for Outgoing Cable.	20-SDMS-02	
53	2	Flexible Pipe, 2 Mtrs. 75mm I.D for 4X300mm2 Incoming Cable	20-SDMS-02	
54	36M	Quadruplex Cable, 120mm2	11-SDMS-02	
55	3	Strain Clamp, 3 U—Bolts for Merlin	20-SDMS-02	Fig. 29
56	3	Anchor Shackle	20-SDMS-02	Fig. 20
57	3	Double Arming Plate	20-SDMS-02	Fig. 07
58	1 Set	M.V-S.C Two stay Assembly	SDCS-01	Drw. 313
59	1 Set	L.T One stay Assembly (Optional)	SDCS-01	Drw. 310
60	6	Phasing Plates Mounting Brackets	20-SDMS-02	Fig. 54
61	1	Bi-Mettalic Connector, 2 Bolt Type for 70mm2 Cu70mm2 Al.	20-SDMS-02	
62	4	Bi-Mettalic Connector, 2 Bolt Type for 70mm2 Cu120mm2 Al.	20-SDMS-02	
63	2 Set	Danger Sign Plate Complete With Its Accessories	20-SDMS-02	Fig. 49
64	29М	Anti-Climbing Divice, Barbed Wire	20-SDMS-02	Fig. 13
65	4	Buckle Type, Locking Clip for Barbed Wire	20-SDMS-02	Fig. 13
66	3Set	Suspension Insulator	15-SDMS-01	
67	1 Set	L.T One stay Assembly On PMT-Structure/200	SDCS-01	Drw. 32
68	34M	Stay wire 7/4, 12mm Dia, HDG Steel UTS 101kN Min.	SDCS-01	
69	28M	Stay wire 7/3.25, 9.8mm Dia, HDG Steel UTS 65 Min. (Optional)	SDCS-01	
70	3	Parallel Groove Clamp for 3 U-Bolts type for Merlin ACSR	20-SDMS-02	Fig. 39
71	1	Parallel Groove Clamp for two Bolts type for Quail ACSR	20-SDMS-02	Fig. 39
72	2 Set	Danger Sign Mounting Brackets	20-SDMS-02	Fig. 50

DRW.15A2/3-200kVA TRANSFORMER PLATFORM-14M MV & 10M LV TERMINAL STRUCTURE WITH STAYS & PMT CABINET



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DATE: DECEMBER 2005G

		DATE: DECEMBER 2003G		7
SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFE	ENCES
73	1	Pole Numbering Base Plate	20-SDMS-0	2 Fig. 51
74	1 Set	Pole Numbering Plates	20-SDMS-0	2 Fig. 51
75	1	Equipment Numbering Base Plate	20-SDMS-0	2 Fig. 52
76	1 Set	Equipment Numbering Plates	20-SDMS-0	2 Fig. 52
77	16	Terminal Lugs for Cable 4X300mm2 Al.	12-SDMS-0	2 Fig. 4
78	12	Terminal Lugs for Quadruplex Cable 4X120mm2 Al.	12-SDMS-0	2 Fig. 4
	I		<u> </u>	

DRW.15A3/3-200kVA TRANSFORMER PLATFORM-14M MV & 10M LV TERMINAL STRUCTURE WITH STAYS & PMT CABINET



# الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFEREN	ICES
01	1	OC14S-14 Meter Steel Pole, HDG, Single Circuit	20-SDMS-01	Page 36
02	1	OC10-10 Meter Steel Pole, HDG, LV Single Circuit	20-SDMS-01	Page 33
03	5	Crossarm-L 100x100x12x2400mm L.G.	20-SDMS-02	Fig. 1
04	1	Fuse Cut-Out Mounting Channel-C 125x65x65x6x2400mm L.G.	20-SDMS-02	Fig. 2
05	2	Transformer Mounting Channel—C 150x75x75x6.5x2400mm L.G.	20-SDMS-02	Fig. 3
06	2	Brace-L 50x50x4x828mm L.G.	20-SDMS-02	Fig. 4
07	2	Brace-L 50x50x4x828mm L.G. With One End Clipped	20-SDMS-02	Fig. 4
08	4	Line Post Insulator	15-SDMS-01	Clause 4.2.8
09	4 Set	Preformed Line Post Insulator Top Tie for Quail	20-SDMS-02	Fig. 35
10	4	Strain Clamp, Straight Line Deadend Type for Quadruplex	20-SDMS-02	Fig. 30
11	1	Strain Clamp, Straight Line Deadend Type for Quail ACSR	20-SDMS-02	Fig. 30
12	1	Shoulder Eye Bolt, M16x155mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
13	1	Shoulder Eye Bolt, M16x180mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
14	1	Shoulder Eye Bolt, M16x275mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
15	1	Shoulder Eye Bolt, M16x310mm W/Nut, 1 Flat Washer & 1 Spring Washer	20-SDMS-02	Fig. 16
16	2	Eye Nut M16	20-SDMS-02	Fig. 18
17	18	Machine Bolt, M20x60mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 14
18	2	Machine Bolt, M20x225mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
19	2	Machine Bolt, M20x285mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
20	1	Machine Bolt, M20x365mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
21	2	Machine Bolt, M20x400mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
22	2	Machine Bolt, M16x165mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
23	1	Machine Bolt, M16x275mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
24	2	Machine Bolt, M16x300mm With Nut, 2 Flat Washers & 1 Spring Washer	20-SDMS-02	Fig. 15
25	3	Parallel Groove Compression Connector for Merlin — Quail	20-SDMS-02	Fig. 39
26	2	Earthwire Suspension Support, L 110x110x10x150mm Lg.	20-SDMS-02	Fig. 5
27	1	Transformer, 300KVA.	51-SDMS-01	
28	3	Fuse Cut-Out (Complete Assembly)	34-SDMS-01	
29	3	Terminal Plug For 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 42
30	9	Terminal Lug for 35mm2 Cu.	20-SDMS-02	Fig. 46
31	3	Surge Arrester, 33kV	35-SDMS-01	
32	17M	70mm2 Copper Bare Conductor		
33	21M	Quail Conductor, 67.44mm2 ACSR/AW	10-SDMS-01	
34	9М	Cu. Conductor, Insulated Stranded 35mm2 Soft Drawn	11-SDMS-01	
35	3	35mm2 Cu. Flexible Cored Wire with Lugs	20-SDMS-02	
36	13	Terminal Lug for 70mm2 Cu.	12-SDMS-01	
37	2	Crimpit Cu. Connector for 70mm2	20-SDMS-02	Fig. 45

DRW.15B1/3-300kVA TRANSFORMER PLATFORM-14M MV & 10M LV TERMINAL STRUCTURE WITH STAYS & PMT CABINET



# الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REF	ERENCES
38	1	Ground Wire Guard	20-SDMS	-02 Fig. 47
39	4	Suspension Insulator (Single)	15-SDMS	-01
40	7	Clevis Eye Extension	20-SDMS	-02 Fig. 21
41	15M	Stainless Steel Strap Band	20-SDMS	-02 Fig. 55
42	20	Buckle for Stainless Steel Strap Band	20-SDMS	-02 Fig. 55
43	1	P.M.T. Cabinet 800A	31-SDMS	-03
44	6М	Cable – 4x300mm2 Al. Main Incoming	11-SDMS	-01
45	4	Cable Tie	20-SDMS	-02 Fig. 63
46	12	Insulated Type Sleeve for Connecting Quadruplex 120mm2	2-120mm2 20-SDMS	-02 Fig. 34
47	2 Set	Phasing Plates (A,B,C)	20-SDMS	-02 Fig. 53
48	6M	Rigid PVC Sleeve for Stainless Steel Strap	20-SDMS	-02 Fig. 55
49	36M	Cu. Conductor Insulated, stranded 70mm2 Soft Drawn	11-SDMS	-01
50	4	Polyethelene Rigid Pipe, 3Mtrs. 70mm O.D. 3mm Thicknes	SS	
51	4	Weather Head, Al. for 70mm O.D. PVC Rigid Pipe	20-SDMS	-02
52	4	Flexible Pipe, 2.5 Mtrs. 70mm O.D. PVC Rigid Pipe for O	utgoing Cable. 20-SDMS	-02
53	2	Flexible Pipe, 2 Mtrs. 75mm I.D for 4X300mm2 Incoming	Cable 20-SDMS	-02
54	36M	Quadruplex Cable, 120mm2	11-SDMS	-02
55	3	Strain Clamp, 3 U—Bolts for Merlin	20-SDMS	-02 Fig. 29
56	3	Anchor Shackle	20-SDMS	-02 Fig. 20
57	3	Double Arming Plate	20-SDMS	-02 Fig. 07
58	1 Set	M.V-S.C Two stay Assembly	SDCS-01	Drw. 313
59	1 Set	L.T One stay Assembly (Optional)	SDCS-01	Drw. 310
60	6	Phasing Plates Mounting Brackets	20-SDMS	-02 Fig. 54
61	1	Bi-Mettalic Connector, 2 Bolt Type for 70mm2 Cu70mm	m2 Al. 20-SDMS	-02
62	4	Bi-Mettalic Connector, 2 Bolt Type for 70mm2 Cu120n	nm2 Al. 20-SDMS	-02
63	2 Set	Danger Sign Plate Complete With Its Accessories	20-SDMS	-02 Fig. 49
64	29M	Anti-Climbing Device, Barbed Wire	20-SDMS	-02 Fig. 13
65	4	Buckle Type, Locking Clip for Barbed Wire	20-SDMS	-02 Fig. 13
66	3Set	Suspension Insulator	15-SDMS	-01
67	1 Set	L.T One stay Assembly On PMT—Structure/200	SDCS-01	Drw. 321
68	34M	Stay wire 7/4, 12mm Dia, HDG Steel UTS 101kN Min.	SDCS-01	
69	28M	Stay wire 7/3.25, 9.8mm Dia, HDG Steel UTS 65 Min. (0	Optional) SDCS-01	
70	3	Parallel Groove Clamp for 3 U—Bolts type for Merlin ACS	R 20-SDMS	-02 Fig. 39
71	1	Parallel Groove Clamp for two Bolts type for Quail ACSR	20-SDMS	_02 Fig. 39
72	2 Set	Danger Sign Mounting Brackets	20-SDMS	-02 Fig. 50

DRW.15B2/3-300kVA TRANSFORMER PLATFORM-14M MV & 10M LV TERMINAL STRUCTURE WITH STAYS & PMT CABINET



# الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

			DATE: DECEMBER 2000G		
SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION		REFERENCES	
73	1	Pole Numbering Base Plate	20-	-SDMS-02	Fig. 51
74	1 Set	Pole Numbering Plates	20-	-SDMS-02	Fig. 51
75	1	Equipment Numbering Base Plate	20-	-SDMS-02	Fig. 52
76	1 Set	Equipment Numbering Plates	20-	-SDMS-02	Fig. 52
77	16	Terminal Lugs for Cable 4X300mm2 Al.	12-	-SDMS-02	Fig. 4
78	12	Terminal Lugs for Quadruplex Cable 4X120mm2 Al.	12-	-SDMS-02	Fig. 4
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DRW.15B3/3-300kVA TRANSFORMER PLATFORM-14M MV & 10M LV TERMINAL STRUCTURE WITH STAYS & PMT CABINET

# Saudi Electricity Company الشركة السعودية للكهرباء SDCS-01 SEC DISTRIBUTION CONSTRUCTION STANDARDS DATE: DECEMBER 2005G 50/100kVA PMT ON 12M POLE SINGLE POLE TRANSFORMER STRUCTURE

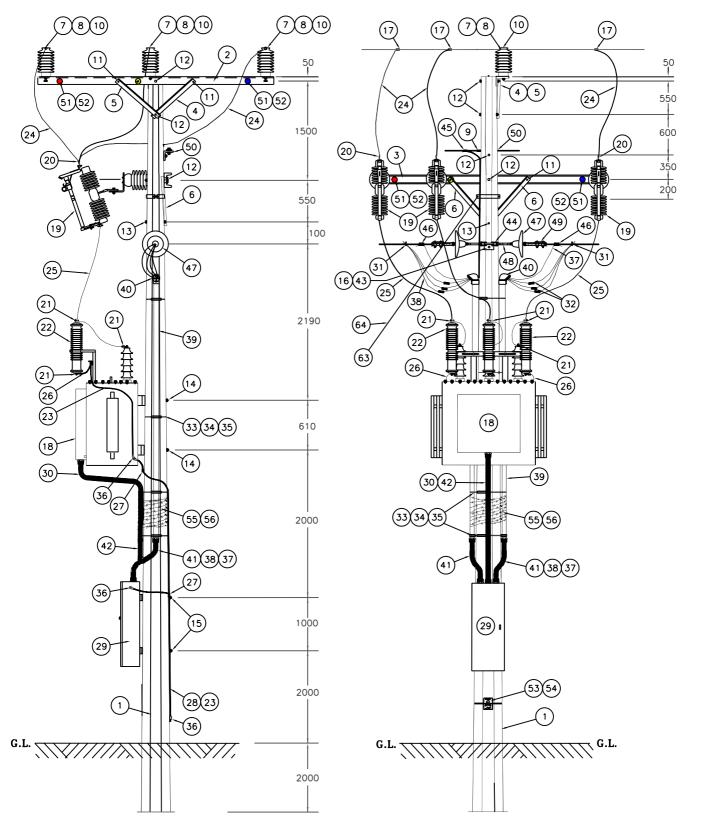


### الشركة السعودية للكهرباء

SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G



DRW.180-SINGLE POLE MOUNTED TRANSFORMER 50/100kVA ON 12M M.V INTERMEDIATE STRUCTURE (0°-5°) WITH PMT CABINET

ALL DIMENSIONS ARE IN MILLIMETER



## الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFEREN	ICES
01	1	OC12S-12 Meter Steel Pole, HDG, Single Circuit	20-SDMS-01	Page 34
02	1	Crossarm-L 100x100x12x2400mm L.G.	20-SDMS-02	Fig. 1
03	1	Fuse Cut—Out Mounting Channel—Single Pole 125x65x65x6x2400mm L.G.	20-SDMS-02	Fig.
04	1	Brace-L 50x50x4x828mm L.G.	20-SDMS-02	Fig. 4
05	1	Brace—L 50x50x4x828mm L.G. With One End Clipped	20-SDMS-02	Fig. 4
06	2	Brace—L 50x50x4x828mm L.G. With Both End Clipped	20-SDMS-02	Fig.
07	3	Line Post Insulator	15-SDMS-01	Clause 4.2.8
08	3 Set	Preformed Armour Rods For 170.5mm2 ACSR/AW (Merlin)	20-SDMS-02	Fig. 38
09	1 Set	Preformed Armour Rod for 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 38
10	3 Set	Preformed Line Post Insulator Top Tie for Merlin With Armour	20-SDMS-02	Fig. 35
11	4	Machine Bolt, M20x60mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
12	4	Machine Bolt, M20x225mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
13	1	Machine Bolt, M20x265mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
14	2	Machine Bolt, M20x310mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
15	2	Machine Bolt, M20x365mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
16	1	Machine Bolt, M16x275mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
17	3	Parallel Groove Compression Connector for Merlin — Quail	20-SDMS-02	Fig. 39
18	1	Transformer, 50KVA	51-SDMS-01	
19	3	Fuse Cut-Out (Complete Assembly)	34-SDMS-01	
20	3	Terminal Plug For 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 42
21	9	Terminal Lug for 35mm2 Cu.	12-SDMS-02	Fig. 1
22	3	Surge Arrester	35-SDMS-01	
23	15M	70mm2 Cu. Bare Conductor		
24	15M	Quail Conductor, 67.44mm2 ACSR/AW	10-SDMS-01	
25	9М	Cu. Conductor, Insulated Stranded 35mm2 Soft Drawn		
26	3	35mm2 Cu. Flexible Cored Wire with Lugs	20-SDMS-02	
27	2	Crimpit Cu. Connector for 70mm2	20-SDMS-02	Fig. 45
28	1	Ground Wire Guard	20-SDMS-02	Fig. 47
29	1	P.M.T. Cabinet 400A	31-SDMS-03	
30	4M	Cable Al. — 4x185mm2 Main Incoming	11-SDMS-01	
31	2	Cable Tie	20-SDMS-02	Fig. 63
32	6	Insulated Type Sleeve for Connecting Quadruplex/120mm2—120mm2	20-SDMS-02	Fig. 34
33	10M	Stainless Steel Strap Band	20-SDMS-02	Fig. 55
34	10	Buckle for Stainless Steel Strap Band	20-SDMS-02	Fig. 55
35	3	Rigid PVC Sleeve for Stainless Steel Strap	20-SDMS-02	Fig. 55

DRW.180A1/2-SINGLE POLE MOUNTED TRANSFORMER 50kVA ON 12M M.V INTERMEDIATE STRUCTURE (0°-5°) WITH PMT CABINET

TRSP1A



## الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFEREN	CES
36	11	Terminal Lug 70mm2 Cu. Cable	12-SDMS-02	
37	18M	Cu. Conductor Insulated Stranded 70mm2 Soft Drawn		
38	18M	Quadruplex Cable 120mm2 Al.	11-SDMS-02	
39	2	Polyethelene Rigid Pipe, 3 Mtrs. 70mm O.D. 3mm Thickness	20-SDMS-02	
40	2	Weather Head, Al. for 70mm O.D. PVC 3mm Thickness	20-SDMS-02	
41	2	Flexible Pipe, 1Mtr. 70mm O.D. PVC Rigid Pipe for Outgoing Cable	20-SDMS-02	
42	1	Flexible Pipe, 4 Mtrs. 75mm I.D for 4x185mm2 Incoming Cable	20-SDMS-02	
43	1	Earth Wire Suspension Support	20-SDMS-02	Fig. 05
44	2	Anchore Shackle	20-SDMS-02	Fig. 20
45	1	Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu70mm2 Al.	20-SDMS-02	
46	2	Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu120mm2 Al.	20-SDMS-02	
47	2	Suspension Insulator	15-SDMS-01	Clause 4.2.5
48	2	Clevis Eye Extension	20-SDMS-02	Fig. 21
49	2	Strain Clamp, Straight Line Deadend Type for Quadruplex	20-SDMS-02	Fig. 30
50	1	Earthwire Support Plate, L 110x110x10x150mm Lg.	20-SDMS-02	Fig. 6
51	2 Set	Phasing Plates (A,B,C).	20-SDMS-02	Fig. 53
52	6	Phasing Plates Mounting Brackets.	20-SDMS-02	Fig. 54
53	1 Set	Danger Sign Plate Complete With Its Accessories	20-SDMS-02	Fig. 49
54	1 Set	Danger Sign Mounting Brackets	20-SDMS-02	Fig. 50
55	15M	Anti-Climbing Divice, Barbed Wire	20-SDMS-02	Fig. 13
56	2	Buckle Type, Locking Clip for Barbed Wire	20-SDMS-02	Fig. 13
57	1	Pole Numbering Base Plate	20-SDMS-02	Fig. 51
58	1 Set	Pole Numbering Plates	20-SDMS-02	Fig. 51
59	1	Equipment Numbering Base Plate	20-SDMS-02	Fig. 52
60	1 Set	Equipment Numbering Plates	20-SDMS-02	Fig. 52
61	8	Terminal Lugs for Cable 4X185mm2 Al.	12-SDMS-02	Fig. 4
62	6	Terminal Lugs for Quadruplex Cable 4X120mm2 Al.	12-SDMS-02	Fig. 4
63	1 Set	L.T One Stay assembly On PMT-Structure/200 (Optional)	SDCS-01	Drw. 310
64	13M	Stay wire 7/3.25, 9.8mm Dia, HDG steel, UTS 65kN Min. (Optional)	SDCS-01	

DRW.180A2/2-SINGLE POLE MOUNTED TRANSFORMER 50kVA ON 12M M.V INTERMEDIATE STRUCTURE (0°-5°) WITH PMT CABINET



## الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFEREN	ICES
01	1	OC12S-12 Meter Steel Pole, HDG, Single Circuit	20-SDMS-01	Page 34
02	1	Crossarm-L 100x100x12x2400mm L.G.	20-SDMS-02	Fig. 1
03	1	Fuse Cut—Out Mounting Channel—Single Pole 125x65x65x6x2400mm L.G.	20-SDMS-02	Fig.
04	1	Brace-L 50x50x4x828mm L.G.	20-SDMS-02	Fig. 4
05	1	Brace—L 50x50x4x828mm L.G. With One End Clipped	20-SDMS-02	Fig. 4
06	2	Brace—L 50x50x4x828mm L.G. With Both End Clipped	20-SDMS-02	Fig.
07	3	Line Post Insulator	15-SDMS-01	Clause 4.2.8
08	3 Set	Preformed Armour Rods For 170.5mm2 ACSR/AW (Merlin)	20-SDMS-02	Fig. 38
09	1 Set	Preformed Armour Rod for 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 38
10	3 Set	Preformed Line Post Insulator Top Tie for Merlin With Armour	20-SDMS-02	Fig. 35
11	4	Machine Bolt, M20x60mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
12	4	Machine Bolt, M20x225mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
13	1	Machine Bolt, M20x265mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
14	2	Machine Bolt, M20x310mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
15	2	Machine Bolt, M20x365mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
16	1	Machine Bolt, M16x275mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
17	3	Parallel Groove Compression Connector for Merlin — Quail	20-SDMS-02	Fig. 39
18	1	Transformer, 100kVA	51-SDMS-01	
19	3	Fuse Cut-Out (Complete Assembly)	34-SDMS-01	
20	3	Terminal Plug For 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 42
21	9	Terminal Lug for 35mm2 Cu.	12-SDMS-02	Fig. 1
22	3	Surge Arrester	35-SDMS-01	
23	15M	70mm2 Cu. Bare Conductor		
24	15M	Quail Conductor, 67.44mm2 ACSR/AW	10-SDMS-01	
25	9М	Cu. Conductor, Insulated Stranded 35mm2 Soft Drawn		
26	3	35mm2 Cu. Flexible Cored Wire with Lugs	20-SDMS-02	
27	2	Crimpit Cu. Connector for 70mm2	20-SDMS-02	Fig. 45
28	1	Ground Wire Guard	20-SDMS-02	Fig. 47
29	1	P.M.T. Cabinet 400A	31-SDMS-03	
30	4M	Cable Al. — 4x185mm2 Main Incoming	11-SDMS-01	
31	2	Cable Tie	20-SDMS-02	Fig. 63
32	6	Insulated Type Sleeve for Connecting Quadruplex/120mm2—120mm2	20-SDMS-02	Fig. 34
33	10M	Stainless Steel Strap Band	20-SDMS-02	Fig. 55
34	10	Buckle for Stainless Steel Strap Band	20-SDMS-02	Fig. 55
35	3	Rigid PVC Sleeve for Stainless Steel Strap	20-SDMS-02	Fig. 55

DRW.180B1/2-SINGLE POLE MOUNTED TRANSFORMER 100kVA ON 12M M.V INTERMEDIATE STRUCTURE (0°-5°) WITH PMT CABINET

TRSP1A



## الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL	TUTY I BILL OF MATERIALS DESCRIPTION I DI		REFEREN	CES
<b>NO.</b> 36	11	Terminal Lug 70mm2 Cu. Cable	12-SDMS-02	
37	18M	Cu. Conductor Insulated Stranded 70mm2 Soft Drawn	1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	
38	18M	Quadruplex Cable 120mm2 Al.	11-SDMS-02	
39	2	Polyethelene Rigid Pipe, 3 Mtrs. 70mm O.D. 3mm Thickness	20-SDMS-02	
40	2	Weather Head, Al. for 70mm O.D. PVC 3mm Thickness	20-SDMS-02	
41	2	Flexible Pipe, 1Mtr. 70mm O.D. PVC Rigid Pipe for Outgoing Cable	20-SDMS-02	
42	1	Flexible Pipe, 4 Mtrs. 75mm I.D for 4x185mm2 Incoming Cable	20-SDMS-02	
43	1	Earth Wire Suspension Support	20-SDMS-02	Fig. 05
44	2	Anchore Shackle	20-SDMS-02	Fig. 20
45	1	Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu70mm2 Al.	20-SDMS-02	1 lg. 20
46	2	Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu120mm2 Al.	20-SDMS-02	
47	2	Suspension Insulator	15-SDMS-01	Clause
48	2	Clevis Eye Extension	20-SDMS-02	4.2.5 Fig. 21
49	2	Strain Clamp, Straight Line Deadend Type for Quadruplex	20-SDMS-02	Fig. 30
50	1	Earthwire Support Plate, L 110x110x150mm Lg.	20-SDMS-02	Fig. 6
51	2 Set	Phasing Plates (A,B,C).	20-SDMS-02	Fig. 53
52	6	Phasing Plates Mounting Brackets.	20-SDMS-02	Fig. 54
53	1 Set	Danger Sign Plate Complete With Its Accessories	20-SDMS-02	Fig. 49
54	1 Set	Danger Sign Mounting Brackets	20-SDMS-02	Fig. 50
55	15M	Anti-Climbing Divice, Barbed Wire	20-SDMS-02	Fig. 13
56	2	Buckle Type, Locking Clip for Barbed Wire	20-SDMS-02	Fig. 13
57	1	Pole Numbering Base Plate	20-SDMS-02	Fig. 51
58	1 Set	Pole Numbering Plates	20-SDMS-02	Fig. 51
59	1	Equipment Numbering Base Plate	20-SDMS-02	Fig. 52
60	1 Set	Equipment Numbering Plates	20-SDMS-02	Fig. 52
61	8	Terminal Lugs for Cable 4X185mm2 Al.	12-SDMS-02	Fig. 4
62	6	Terminal Lugs for Quadruplex Cable 4X120mm2 Al.	12-SDMS-02	Fig. 4
63	1 Set	L.T One Stay assembly On PMT—Structure/200 (Optional)	SDCS-01	Drw. 310
64	13M	Stay wire 7/3.25, 9.8mm Dia, HDG steel, UTS 65kN Min. (Optional)	SDCS-01	

DRW.180B2/2-SINGLE POLE MOUNTED TRANSFORMER 100kVA ON 12M M.V INTERMEDIATE STRUCTURE (0°-5°) WITH PMT CABINET

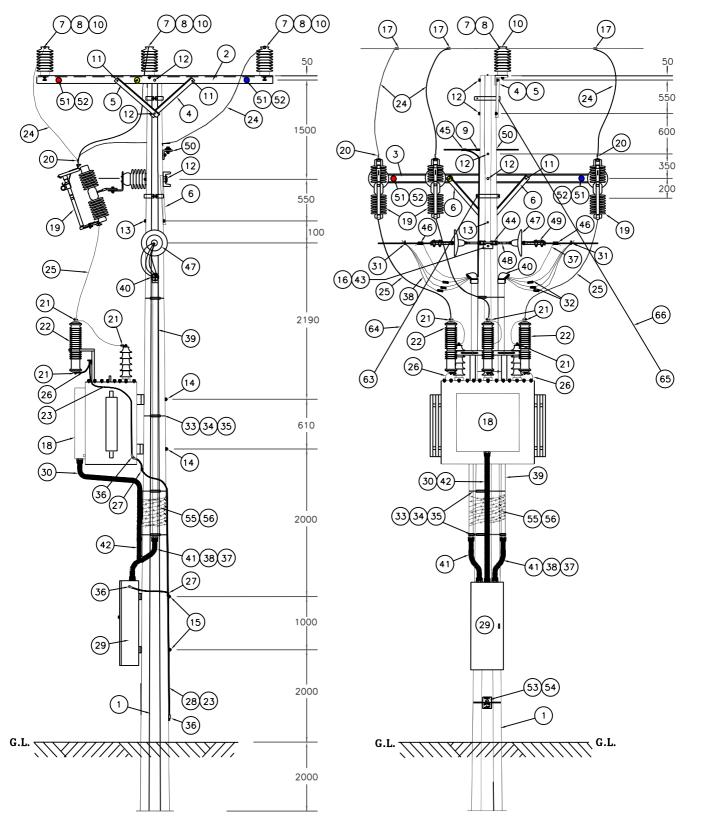


### الشركة السعودية للكهرباء

SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G



DRW.181-SINGLE POLE MOUNTED TRANSFORMER 50/100kVA ON 12M M.V LIGHT ANGLE STRUCTURE (6°-15°) WITH PMT CABINET

ALL DIMENSIONS ARE IN MILLIMETER



## الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFEREN	ICES
01	1	OC12S-12 Meter Steel Pole, HDG, Single Circuit	20-SDMS-01	Page 34
02	1	Crossarm-L 100x100x12x2400mm L.G.	20-SDMS-02	Fig. 1
03	1	Fuse Cut—Out Mounting Channel—Single Pole 125x65x65x6x2400mm L.G.	20-SDMS-02	Fig.
04	1	Brace-L 50x50x4x828mm L.G.	20-SDMS-02	Fig. 4
05	1	Brace-L 50x50x4x828mm L.G. With One End Clipped	20-SDMS-02	Fig. 4
06	2	Brace—L 50x50x4x828mm L.G. With Both End Clipped	20-SDMS-02	Fig.
07	3	Line Post Insulator	15-SDMS-01	Clause 4.2.8
08	3 Set	Preformed Armour Rods For 170.5mm2 ACSR/AW (Merlin)	20-SDMS-02	Fig. 38
09	1 Set	Preformed Armour Rod for 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 38
10	3 Set	Preformed Line Post Insulator Side Tie for Merlin With Armour	20-SDMS-02	Fig. 35
11	4	Machine Bolt, M20x60mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
12	4	Machine Bolt, M20x225mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
13	1	Machine Bolt, M20x265mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
14	2	Machine Bolt, M20x310mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
15	2	Machine Bolt, M20x365mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
16	1	Machine Bolt, M16x275mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
17	3	Parallel Groove Compression Connector for Merlin — Quail	20-SDMS-02	Fig. 39
18	1	Transformer, 50KVA	51-SDMS-01	
19	3	Fuse Cut—Out (Complete Assembly)	34-SDMS-01	
20	3	Terminal Plug For 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 42
21	9	Terminal Lug for 35mm2 Cu.	12-SDMS-02	Fig. 1
22	3	Surge Arrester	35-SDMS-01	
23	15M	70mm2 Cu. Bare Conductor		
24	15M	Quail Conductor, 67.44mm2 ACSR/AW	10-SDMS-01	
25	9М	Cu. Conductor, Insulated Stranded 35mm2 Soft Drawn		
26	3	35mm2 Cu. Flexible Cored Wire with Lugs	20-SDMS-02	
27	2	Crimpit Cu. Connector for 70mm2	20-SDMS-02	Fig. 45
28	1	Ground Wire Guard	20-SDMS-02	Fig. 47
29	1	P.M.T. Cabinet 400A	31-SDMS-03	
30	4M	Cable Al. — 4x185mm2 Main Incoming	11-SDMS-01	
31	2	Cable Tie	20-SDMS-02	Fig. 63
32	6	Insulated Type Sleeve for Connecting Quadruplex/120mm2—120mm2	20-SDMS-02	Fig. 34
33	10M	Stainless Steel Strap Band	20-SDMS-02	Fig. 55
34	10	Buckle for Stainless Steel Strap Band	20-SDMS-02	Fig. 55
35	3	Rigid PVC Sleeve for Stainless Steel Strap	20-SDMS-02	Fig. 55

DRW.181A1/2-SINGLE POLE MOUNTED TRANSFORMER 50kVA ON 12M M.V LIGHT ANGLE STRUCTURE (6°-15°) WITH PMT CABINET

TRSP1A



# الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFEREN	CES
36	11	Terminal Lug 70mm2 Cu. Cable	12-SDMS-02	
37	18M	Cu. Conductor Insulated Stranded 70mm2 Soft Drawn		
38	18M	Quadruplex Cable 120mm2 Al.	11-SDMS-02	
39	2	Polyethelene Rigid Pipe, 3 Mtrs. 70mm O.D. 3mm Thickness	20-SDMS-02	
40	2	Weather Head, Al. for 70mm O.D. PVC 3mm Thickness	20-SDMS-02	
41	2	Flexible Pipe, 1Mtr. 70mm O.D. PVC Rigid Pipe for Outgoing Cable	20-SDMS-02	
42	1	Flexible Pipe, 4 Mtrs. 75mm I.D for 4x185mm2 Incoming Cable	20-SDMS-02	
43	1	Earth Wire Suspension Support	20-SDMS-02	Fig. 05
44	2	Anchore Shackle	20-SDMS-02	Fig. 20
45	1	Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu70mm2 Al.	20-SDMS-02	
46	2	Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu120mm2 Al.	20-SDMS-02	
47	2	Suspension Insulator	15-SDMS-01	Clause 4.2.5
48	2	Clevis Eye Extension	20-SDMS-02	Fig. 21
49	2	Strain Clamp, Straight Line Deadend Type for Quadruplex	20-SDMS-02	Fig. 30
50	1	Earthwire Support Plate, L 110x110x10x150mm Lg.	20-SDMS-02	Fig. 6
51	2 Set	Phasing Plates (A,B,C).	20-SDMS-02	Fig. 53
52	6	Phasing Plates Mounting Brackets.	20-SDMS-02	Fig. 54
53	1 Set	Danger Sign Plate Complete With Its Accessories	20-SDMS-02	Fig. 49
54	1 Set	Danger Sign Mounting Brackets	20-SDMS-02	Fig. 50
55	15M	Anti-Climbing Divice, Barbed Wire	20-SDMS-02	Fig. 13
56	2	Buckle Type, Locking Clip for Barbed Wire	20-SDMS-02	Fig. 13
57	1	Pole Numbering Base Plate	20-SDMS-02	Fig. 51
58	1 Set	Pole Numbering Plates	20-SDMS-02	Fig. 51
59	1	Equipment Numbering Base Plate	20-SDMS-02	Fig. 52
60	1 Set	Equipment Numbering Plates	20-SDMS-02	Fig. 52
61	8	Terminal Lugs for Cable 4X185mm2 Al.	12-SDMS-02	Fig. 4
62	6	Terminal Lugs for Quadruplex Cable 4X120mm2 Al.	12-SDMS-02	Fig. 4
63	1 Set	L.T One Stay assembly On PMT-Structure/200 (Optional)	SDCS-01	Drw. 310
64	13M	Stay wire 7/3.25, 9.8mm Dia, HDG steel, UTS 65kN Min. (Optional)	SDCS-01	
65	1 Set	M.V-S.C One Stay assembly	SDCS-01	Drw. 312
66	15M	Stay wire 7/4, 12mm Dia, HDG steel, UTS 101kN Min.	SDCS-01	

DRW.181A2/2-SINGLE POLE MOUNTED TRANSFORMER 50kVA ON 12M M.V LIGHT ANGLE STRUCTURE (6°-15°) WITH PMT CABINET



## الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFEREN	ICES
01	1	OC12S-12 Meter Steel Pole, HDG, Single Circuit	20-SDMS-01	Page 34
02	1	Crossarm-L 100x100x12x2400mm L.G.	20-SDMS-02	Fig. 1
03	1	Fuse Cut—Out Mounting Channel—Single Pole 125x65x65x6x2400mm L.G.	20-SDMS-02	Fig.
04	1	Brace-L 50x50x4x828mm L.G.	20-SDMS-02	Fig. 4
05	1	Brace-L 50x50x4x828mm L.G. With One End Clipped	20-SDMS-02	Fig. 4
06	2	Brace—L 50x50x4x828mm L.G. With Both End Clipped	20-SDMS-02	Fig.
07	3	Line Post Insulator	15-SDMS-01	Clause 4.2.8
08	3 Set	Preformed Armour Rods For 170.5mm2 ACSR/AW (Merlin)	20-SDMS-02	Fig. 38
09	1 Set	Preformed Armour Rod for 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 38
10	3 Set	Preformed Line Post Insulator Side Tie for Merlin With Armour	20-SDMS-02	Fig. 35
11	4	Machine Bolt, M20x60mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
12	4	Machine Bolt, M20x225mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
13	1	Machine Bolt, M20x265mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
14	2	Machine Bolt, M20x310mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
15	2	Machine Bolt, M20x365mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
16	1	Machine Bolt, M16x275mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
17	3	Parallel Groove Compression Connector for Merlin — Quail	20-SDMS-02	Fig. 39
18	1	Transformer, 100KVA	51-SDMS-01	
19	3	Fuse Cut—Out (Complete Assembly)	34-SDMS-01	
20	3	Terminal Plug For 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 42
21	9	Terminal Lug for 35mm2 Cu.	12-SDMS-02	Fig. 1
22	3	Surge Arrester	35-SDMS-01	
23	15M	70mm2 Cu. Bare Conductor		
24	15M	Quail Conductor, 67.44mm2 ACSR/AW	10-SDMS-01	
25	9М	Cu. Conductor, Insulated Stranded 35mm2 Soft Drawn		
26	3	35mm2 Cu. Flexible Cored Wire with Lugs	20-SDMS-02	
27	2	Crimpit Cu. Connector for 70mm2	20-SDMS-02	Fig. 45
28	1	Ground Wire Guard	20-SDMS-02	Fig. 47
29	1	P.M.T. Cabinet 400A	31-SDMS-03	
30	4M	Cable Al. — 4x185mm2 Main Incoming	11-SDMS-01	
31	2	Cable Tie	20-SDMS-02	Fig. 63
32	6	Insulated Type Sleeve for Connecting Quadruplex/120mm2—120mm2	20-SDMS-02	Fig. 34
33	10M	Stainless Steel Strap Band	20-SDMS-02	Fig. 55
34	10	Buckle for Stainless Steel Strap Band	20-SDMS-02	Fig. 55
35	3	Rigid PVC Sleeve for Stainless Steel Strap	20-SDMS-02	Fig. 55

DRW.181B1/2-SINGLE POLE MOUNTED TRANSFORMER 100kVA ON 12M M.V LIGHT ANGLE STRUCTURE (6°-15°) WITH PMT CABINET

TRSP1A



## الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL	QTY	BILL OF MATERIALS DESCRIPTION	REFERENC	CES
<b>NO.</b> 36	11	Terminal Lug 70mm2 Cu. Cable	12-SDMS-02	
37	18M	Cu. Conductor Insulated Stranded 70mm2 Soft Drawn	12 35 35 32	
38	18M	Quadruplex Cable 120mm2 Al.	11-SDMS-02	
39	2	Polyethelene Rigid Pipe, 3 Mtrs. 70mm O.D. 3mm Thickness		
40	2	Weather Head, Al. for 70mm O.D. PVC 3mm Thickness	20-SDMS-02 20-SDMS-02	
41	2	Flexible Pipe, 1Mtr. 70mm O.D. PVC Rigid Pipe for Outgoing Cable		
42	1	Flexible Pipe, 4 Mtrs. 75mm I.D for 4x185mm2 Incoming Cable	20-SDMS-02	
43	1 1	Earth Wire Suspension Support	20-SDMS-02	T:- 05
44		Anchore Shackle	20-SDMS-02	Fig. 05
45	2			Fig. 20
46	2	Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu70mm2 Al.	20-SDMS-02 20-SDMS-02	
47		Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu120mm2 Al.		Clause
48	2	Suspension Insulator	15-SDMS-01	4.2.5
49	2	Clevis Eye Extension	20-SDMS-02	Fig. 21
-	2	Strain Clamp, Straight Line Deadend Type for Quadruplex	20-SDMS-02	Fig. 30
50	1	Earthwire Support Plate, L 110x110x10x150mm Lg.	20-SDMS-02	Fig. 6
	2 Set	Phasing Plates (A,B,C).	20-SDMS-02	Fig. 53
52	6	Phasing Plates Mounting Brackets.	20-SDMS-02	Fig. 54
53	1 Set	Danger Sign Plate Complete With Its Accessories	20-SDMS-02	Fig. 49
54	1 Set	Danger Sign Mounting Brackets		Fig. 50
55	15M	Anti-Climbing Divice, Barbed Wire		Fig. 13
56 57	2	Buckle Type, Locking Clip for Barbed Wire		Fig. 13
58	1	Pole Numbering Base Plate		Fig. 51
	1 Set	Pole Numbering Plates	20-SDMS-02	-
59	1	Equipment Numbering Base Plate		Fig. 52 Fig. 52
60	1 Set	Equipment Numbering Plates		
61	8	Terminal Lugs for Cable 4X185mm2 Al.	12-SDMS-02	
62	6	Terminal Lugs for Quadruplex Cable 4X120mm2 Al.		Fig. 4
63	1 Set	L.T One Stay assembly On PMT-Structure/200 (Optional)		Drw. 310
	13M	Stay wire 7/3.25, 9.8mm Dia, HDG steel, UTS 65kN Min. (Optional)	SDCS-01	D. 715
65	1 Set	M.V-S.C One Stay assembly		Drw. 312
66	15M	Stay wire 7/4, 12mm Dia, HDG steel, UTS 101kN Min.	SDCS-01	

DRW.181B2/2-SINGLE POLE MOUNTED TRANSFORMER 100kVA ON 12M M.V LIGHT ANGLE STRUCTURE (6°-15°) WITH PMT CABINET

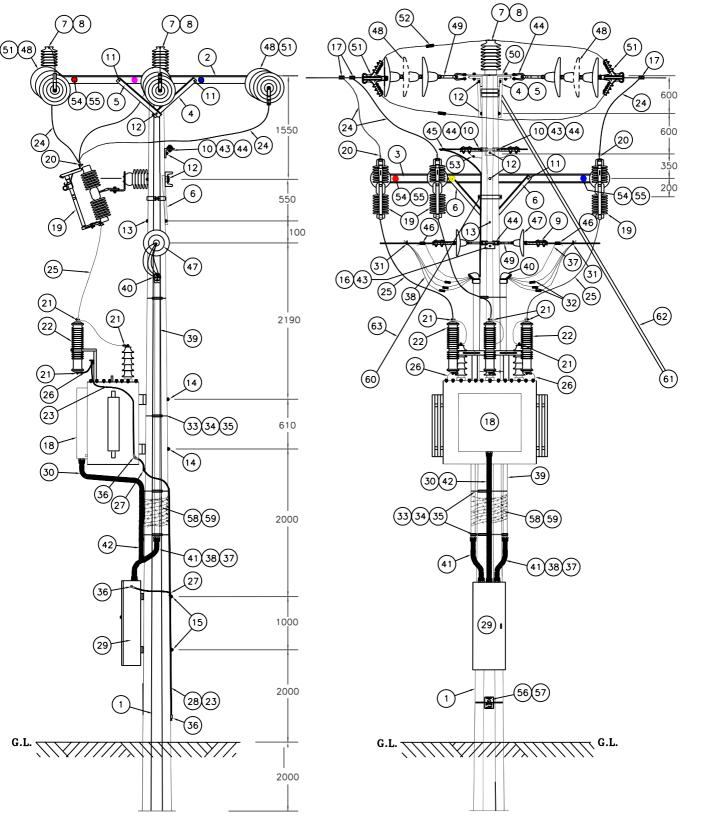


### الشركة السعودية للكهرباء

SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G



DRW.182-SINGLE POLE MOUNTED TRANSFORMER 50/100kVA ON 12M M.V MEDIUM & HEAVY ANGLE STRUCTURE (16°-90°) WITH PMT CABINET

ALL DIMENSIONS ARE IN MILLIMETER



## الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFEREN	ICES
01	1	OC12S-12 Meter Steel Pole, HDG, Single Circuit	20-SDMS-01	Page 34
02	2	Crossarm-L 100x100x12x2400mm L.G.	20-SDMS-02	Fig. 1
03	1	Fuse Cut—Out Mounting Channel—Single Pole 125x65x65x6x2400mm L.G.	20-SDMS-02	Fig.
04	2	Brace-L 50x50x4x828mm L.G.	20-SDMS-02	Fig. 4
05	2	Brace-L 50x50x4x828mm L.G. With One End Clipped	20-SDMS-02	Fig. 4
06	2	Brace-L 50x50x4x828mm L.G. With Both End Clipped	20-SDMS-02	Fig.
07	2	Line Post Insulator	15-SDMS-01	Clause 4.2.8
08	2 Set	Performed Line Post Insulator Top Tie for Merlin ACSR	20-SDMS-02	Fig. 35
09	2	Strain Clamp straight line deadend type for Quadruplex	20-SDMS-02	Fig. 30
10	2	Strain Clamp straight line deadend type for Quail ACSR	20-SDMS-02	Fig. 30
11	12	Machine Bolt, M20x60mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
12	4	Machine Bolt, M20x225mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
13	1	Machine Bolt, M20x265mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
14	2	Machine Bolt, M20x310mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
15	2	Machine Bolt, M20x365mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
16	1	Machine Bolt, M16x275mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
17	3	Parallel Groove Compression Connector for Merlin — Quail	20-SDMS-02	Fig. 39
18	1	Transformer, 50KVA	51-SDMS-01	
19	3	Fuse Cut-Out (Complete Assembly)	34-SDMS-01	
20	3	Terminal Plug For 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 42
21	9	Terminal Lug for 35mm2 Cu.	20-SDMS-02	Fig. 46
22	3	Surge Arrester	35-SDMS-01	
23	15M	70mm2 Copper. Bare Conductor		
24	15M	Quail Conductor, 67.44mm2 ACSR/AW	10-SDMS-01	
25	9М	Copper Conductor, Insulated Stranded 35mm2 Soft Drawn		
26	3	35mm2 Cu. Flexible Cored Wire with Lugs	20-SDMS-02	
27	2	Crimpit Cu. Connector for 70mm2	20-SDMS-02	Fig. 45
28	1	Ground Wire Guard	20-SDMS-02	Fig. 47
29	1	P.M.T. Cabinet 400A	31-SDMS-03	
30	4M	Cable Al. — 4x185mm2 Main Incoming	11-SDMS-01	
31	2	Cable Tie	20-SDMS-02	Fig. 63
32	6	Insulated Type Sleeve for Connecting Quadruplex/120mm2—120mm2	20-SDMS-02	Fig. 34
33	10M	Stainless Steel Strap Band	20-SDMS-02	Fig. 55
34	10	Buckle for Stainless Steel Strap Band	20-SDMS-02	Fig. 55
35	ЗМ	Rigid PVC Sleeve for Stainless Steel Strap	20-SDMS-02	Fig. 55

DRW.182A1/2-SINGLE POLE MOUNTED TRANSFORMER 50kVA ON 12M M.V MEDIUM & HEAVY ANGLE STRUCTURE (16°-90°) WITH PMT CABINET



## الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL	QTY	BILL OF MATERIALS DESCRIPTION	Danner	NORG
NO.	,		REFEREN	1CES
36	11	Terminal Lug for 70mm2 Cu. Cable	12-SDMS-02	
37	18M	Copper Conductor Insulated Stranded 70mm2 Soft Drawn		
38	18M	Quadruplex Cable 120mm2	11-SDMS-02	
39	2	Polyethelene Rigid Pipe, 3 Mtrs. 70mm O.D. 3mm Thickness	20-SDMS-02	
40	2	Weather Head, Al. for 70mm O.D. PVC 3mm Thickness	20-SDMS-02	
41	2	Flexible Pipe, 1Mtr. for 70mm O.D. PVC Rigid Pipe for Outgoing Cable	20-SDMS-02	
42	1	Flexible Pipe, 4 Mtrs, 75mm ID. for 4x185mm2 Incoming Cable	20-SDMS-02	
43	2	Earth Wire Suspension Support	20-SDMS-02	Fig. 05
44	10	Anchor Shackle	20-SDMS-02	Fig. 20
45	1	Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu70mm2 Al.	20-SDMS-02	
46	2	Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu120mm2 Al.	20-SDMS-02	
47	2	Suspension Insulator (Single)	15-SDMS-01	Clause 4.2.5
48	6 Set	Suspension Insulator	15-SDMS-01	Clause 4.2.5
49	8	Clevis Eye Extension	20-SDMS-02	Fig. 21
50	3	Double Arming Plate	20-SDMS-02	Fig. 07
51	6	Strain Clamp 3 U-Bolts type for Merlin	20-SDMS-02	Fig. 29
52	3	Parallel Groove Compression Connector for 170mm2 ACSR/AW (Merlin-Merlin)	20-SDMS-02	Fig. 39
53	1	Parallel Groove Compression Connector for 67.44mm2 ACSR/AW (Quail-Quail)	20-SDMS-02	Fig. 39
54	2 Set	Phasing Plates (A,B,C).	20-SDMS-02	Fig. 53
55	6	Phasing Plates Mounting Brackets.	20-SDMS-02	Fig. 54
56	1 Set	Danger Sign Plate Complete With Its Accessories	20-SDMS-02	Fig. 49
57	1 Set	Danger Sign Mounting Brackets	20-SDMS-02	Fig. 50
58	15M	Anti-Climbing Divice, Barbed Wire	20-SDMS-02	Fig. 13
59	2	Buckle Type, Locking Clip for Barbed Wire	20-SDMS-02	Fig. 13
60	1 Set	L.T One Stay Assembly On PMT —Structure/200 (Optional)	SDCS-01	Drw. 321
61	1 Set	M.V-S.C Two Stay Assembly	SDCS-01	Drw. 313
62	29M	Stay wire 7/4, 12mm Dia, HDG Steel UTS 101kN Min.	SDCS-01	
63	13M	Stay wire 7/3.25, 9.8mm Dia, HDG Steel UTS 65kN Min. (Optional)	SDCS-01	
64	1	Pole Numbering Base Plate	20-SDMS-02	Fig. 51
65	1 Set	Pole Numbering Plates	20-SDMS-02	Fig. 51
66	1	Equipment Numbering Base Plate	20-SDMS-02	Fig. 52
67	1 Set	Equipment Numbering Plates	20-SDMS-02	Fig. 52
68	8	Terminal Lugs for Cable 4X185mm2 Al.	12-SDMS-02	Fig. 4
69	6	Terminal Lugs for Quadruplex Cable 4X120mm2 Al.	12-SDMS-02	Fig. 4
			1	

DRW.182A2/2-SINGLE POLE MOUNTED TRANSFORMER 50kVA ON 12M M.V MEDIUM & HEAVY ANGLE STRUCTURE (16°-90°) WITH PMT CABINET



## الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFEREN	ICES
01	1	OC12S-12 Meter Steel Pole, HDG, Single Circuit	20-SDMS-01	Page 34
02	2	Crossarm-L 100x100x12x2400mm L.G.	20-SDMS-02	Fig. 1
03	1	Fuse Cut—Out Mounting Channel—Single Pole 125x65x65x6x2400mm L.G.	20-SDMS-02	Fig.
04	2	Brace-L 50x50x4x828mm L.G.	20-SDMS-02	Fig. 4
05	2	Brace-L 50x50x4x828mm L.G. With One End Clipped	20-SDMS-02	Fig. 4
06	2	Brace-L 50x50x4x828mm L.G. With Both End Clipped	20-SDMS-02	Fig.
07	2	Line Post Insulator	15-SDMS-01	Clause 4.2.8
08	2 Set	Performed Line Post Insulator Top Tie for Merlin ACSR	20-SDMS-02	Fig. 35
09	2	Strain Clamp straight line deadend type for Quadruplex	20-SDMS-02	Fig. 30
10	2	Strain Clamp straight line deadend type for Quail ACSR	20-SDMS-02	Fig. 30
11	12	Machine Bolt, M20x60mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
12	4	Machine Bolt, M20x225mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
13	1	Machine Bolt, M20x265mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
14	2	Machine Bolt, M20x310mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
15	2	Machine Bolt, M20x365mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
16	1	Machine Bolt, M16x275mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
17	3	Parallel Groove Compression Connector for Merlin — Quail	20-SDMS-02	Fig. 39
18	1	Transformer, 100KVA	51-SDMS-01	
19	3	Fuse Cut—Out (Complete Assembly)	34-SDMS-01	
20	3	Terminal Plug For 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 42
21	9	Terminal Lug for 35mm2 Cu.	20-SDMS-02	Fig. 46
22	3	Surge Arrester	35-SDMS-01	
23	15M	70mm2 Copper. Bare Conductor		
24	15M	Quail Conductor, 67.44mm2 ACSR/AW	10-SDMS-01	
25	9М	Copper Conductor, Insulated Stranded 35mm2 Soft Drawn		
26	3	35mm2 Cu. Flexible Cored Wire with Lugs	20-SDMS-02	
27	2	Crimpit Cu. Connector for 70mm2	20-SDMS-02	Fig. 45
28	1	Ground Wire Guard	20-SDMS-02	Fig. 47
29	1	P.M.T. Cabinet 400A	31-SDMS-03	
30	4M	Cable Al. — 4x185mm2 Main Incoming	11-SDMS-01	
31	2	Cable Tie	20-SDMS-02	Fig. 63
32	6	Insulated Type Sleeve for Connecting Quadruplex/120mm2—120mm2	20-SDMS-02	Fig. 34
33	10M	Stainless Steel Strap Band	20-SDMS-02	Fig. 55
34	10	Buckle for Stainless Steel Strap Band	20-SDMS-02	Fig. 55
35	ЗМ	Rigid PVC Sleeve for Stainless Steel Strap	20-SDMS-02	Fig. 55

DRW.182B1/2-SINGLE POLE MOUNTED TRANSFORMER 100kVA ON 12M M.V MEDIUM & HEAVY ANGLE STRUCTURE (16°-90°) WITH PMT CABINET



## الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL	QTY	BILL OF MATERIALS DESCRIPTION	nnnnn	ICEC
NO.	,		REFEREN	ICES
36	11	Terminal Lug for 70mm2 Cu. Cable	12-SDMS-02	
37	18M	Copper Conductor Insulated Stranded 70mm2 Soft Drawn		
38	18M	Quadruplex Cable 120mm2	11-SDMS-02	
39	2	Polyethelene Rigid Pipe, 3 Mtrs. 70mm O.D. 3mm Thickness	20-SDMS-02	
40	2	Weather Head, Al. for 70mm O.D. PVC 3mm Thickness	20-SDMS-02	
41	2	Flexible Pipe, 1Mtr. for 70mm O.D. PVC Rigid Pipe for Outgoing Cable	20-SDMS-02	
42	1	Flexible Pipe, 4 Mtrs, 75mm ID. for 4x185mm2 Incoming Cable	20-SDMS-02	
43	2	Earth Wire Suspension Support	20-SDMS-02	Fig. 05
44	10	Anchor Shackle	20-SDMS-02	Fig. 20
45	1	Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu70mm2 Al.	20-SDMS-02	
46	2	Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu120mm2 Al.	20-SDMS-02	
47	2	Suspension Insulator (Single)	15-SDMS-01	Clause 4.2.5
48	6 Set	Suspension Insulator	15-SDMS-01	Clause 4.2.5
49	8	Clevis Eye Extension	20-SDMS-02	Fig. 21
50	3	Double Arming Plate	20-SDMS-02	Fig. 07
51	6	Strain Clamp 3 U—Bolts type for Merlin	20-SDMS-02	Fig. 29
52	3	Parallel Groove Compression Connector for 170mm2 ACSR/AW (Merlin-Merlin)	20-SDMS-02	Fig. 39
53	1	Parallel Groove Compression Connector for 67.44mm2 ACSR/AW (Quail-Quail)	20-SDMS-02	Fig. 39
54	2 Set	Phasing Plates (A,B,C).	20-SDMS-02	Fig. 53
55	6	Phasing Plates Mounting Brackets.	20-SDMS-02	Fig. 54
56	1 Set	Danger Sign Plate Complete With Its Accessories	20-SDMS-02	Fig. 49
57	1 Set	Danger Sign Mounting Brackets	20-SDMS-02	Fig. 50
58	15M	Anti-Climbing Divice, Barbed Wire	20-SDMS-02	Fig. 13
59	2	Buckle Type, Locking Clip for Barbed Wire	20-SDMS-02	Fig. 13
60	1 Set	L.T One Stay Assembly On PMT —Structure/200 (Optional)	SDCS-01	Drw. 321
61	1 Set	M.V-S.C Two Stay Assembly	SDCS-01	Drw. 313
62	29M	Stay wire 7/4, 12mm Dia, HDG Steel UTS 101kN Min.	SDCS-01	
63	13M	Stay wire 7/3.25, 9.8mm Dia, HDG Steel UTS 65kN Min. (Optional)	SDCS-01	
64	1	Pole Numbering Base Plate	20-SDMS-02	Fig. 51
65	1 Set	Pole Numbering Plates	20-SDMS-02	Fig. 51
66	1	Equipment Numbering Base Plate	20-SDMS-02	Fig. 52
67	1 Set	Equipment Numbering Plates	20-SDMS-02	Fig. 52
68	8	Terminal Lugs for Cable 4X185mm2 Al.	12-SDMS-02	Fig. 4
69	6	Terminal Lugs for Quadruplex Cable 4X120mm2 Al.	12-SDMS-02	Fig. 4
			1	
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DRW.182B2/2-SINGLE POLE MOUNTED TRANSFORMER 100kVA ON 12M M.V MEDIUM & HEAVY ANGLE STRUCTURE (16°-90°) WITH PMT CABINET

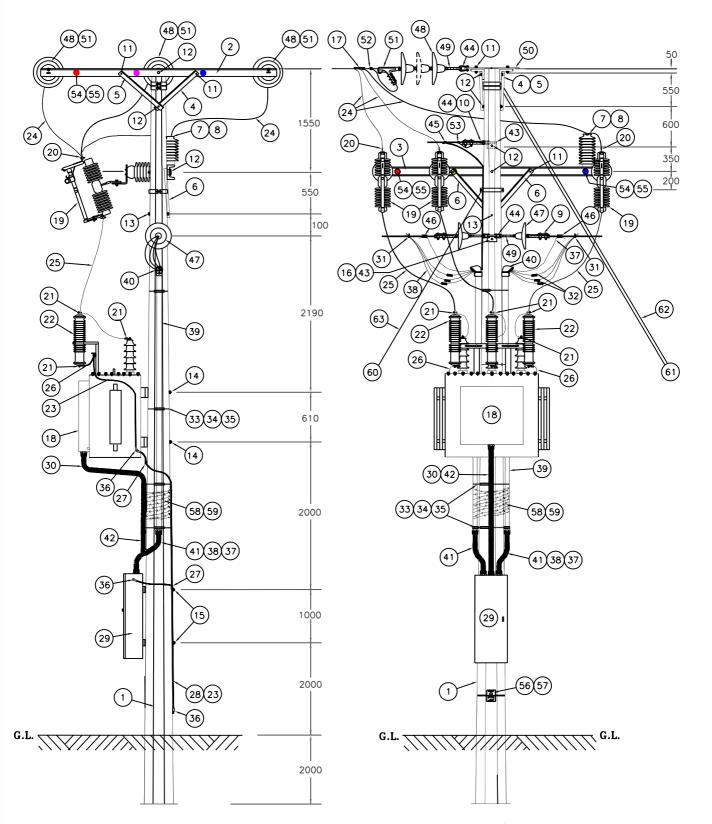


### الشركة السعودية للكهرباء

SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G



DRW.183-SINGLE POLE MOUNTED TRANSFORMER 50/100kVA ON 12M M.V TERMINAL STRUCTURE WITH STAYS & PMT CABINET

ALL DIMENSIONS ARE IN MILLIMETER



## الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFEREN	ICES
01	1	OC12S-12 Meter Steel Pole, HDG, Single Circuit	20-SDMS-01	Page 34
02	2	Crossarm-L 100x100x12x2400mm L.G.	20-SDMS-02	Fig. 1
03	1	Fuse Cut—Out Mounting Channel—Single Pole 125x65x65x6x2400mm L.G.	20-SDMS-02	Fig.
04	2	Brace-L 50x50x4x828mm L.G.	20-SDMS-02	Fig. 4
05	2	Brace-L 50x50x4x828mm L.G. With One End Clipped	20-SDMS-02	Fig. 4
06	2	Brace—L 50x50x4x828mm L.G. With Both End Clipped	20-SDMS-02	Fig.
07	1	Line Post Insulator	15-SDMS-01	Clause 4.2.8
08	1 Set	Performed Line Post Insulator Top Tie for Quail.	20-SDMS-02	Fig. 35
09	2	Strain Clamp straight line deadend type for Quadruplex	20-SDMS-02	Fig. 30
10	1	Strain Clamp straight line deadend type for Quail ACSR	20-SDMS-02	Fig. 30
11	12	Machine Bolt, M20x60mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
12	4	Machine Bolt, M20x225mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
13	1	Machine Bolt, M20x265mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
14	2	Machine Bolt, M20x310mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
15	2	Machine Bolt, M20x365mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
16	1	Machine Bolt, M16x275mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
17	3	Parallel Groove Compression Connector for Merlin — Quail	20-SDMS-02	Fig. 39
18	1	Transformer, 50KVA	51-SDMS-01	
19	3	Fuse Cut-Out (Complete Assembly)	34-SDMS-01	
20	3	Terminal Plug For 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 42
21	9	Terminal Lug for 35mm2 Cu.	20-SDMS-02	Fig. 46
22	3	Surge Arrester	35-SDMS-01	
23	15M	70mm2 Copper. Bare Conductor		
24	15M	Quail Conductor, 67.44mm2 ACSR/AW	10-SDMS-01	
25	9М	Copper Conductor, Insulated Stranded 35mm2 Soft Drawn		
26	3	35mm2 Cu. Flexible Cored Wire with Lugs	20-SDMS-02	
27	2	Crimpit Cu. Connector for 70mm2	20-SDMS-02	Fig. 45
28	1	Ground Wire Guard	20-SDMS-02	Fig. 47
29	1	P.M.T. Cabinet 400A	31-SDMS-03	
30	4M	Cable Al. — 4x185mm2 Main Incoming	11-SDMS-01	
31	2	Cable Tie	20-SDMS-02	Fig. 63
32	6	Insulated Type Sleeve for Connecting Quadruplex/120mm2—120mm2	20-SDMS-02	Fig. 34
33	10M	Stainless Steel Strap Band	20-SDMS-02	Fig. 55
34	10	Buckle for Stainless Steel Strap Band	20-SDMS-02	Fig. 55
35	3М	Rigid PVC Sleeve for Stainless Steel Strap	20-SDMS-02	Fig. 55

DRW.183A1/2-SINGLE POLE MOUNTED TRANSFORMER 50kVA ON 12M M.V TERMINAL STRUCTURE WITH STAYS & PMT CABINET



# الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL	OTN	QTY BILL OF MATERIALS DESCRIPTION REFERENCES			
NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFERENCES		
36	11	Terminal Lug for 70mm2 Cu. Cable	12-SDMS-02		
37	18M	Copper Conductor Insulated Stranded 70mm2 Soft Drawn			
38	18M	Quadruplex Cable 120mm2	11-SDMS-02		
39	2	Polyethelene Rigid Pipe, 3 Mtrs. 70mm O.D. 3mm Thickness	20-SDMS-02		
40	2	Weather Head, Al. for 70mm O.D. PVC 3mm Thickness	20-SDMS-02		
41	2	Flexible Pipe, 1Mtr. for 70mm O.D. PVC Rigid Pipe for Outgoing Cable	20-SDMS-02		
42	1	Flexible Pipe, 4 Mtrs, 75mm ID. for 4x185mm2 Incoming Cable	20-SDMS-02		
43	2	Earth Wire Suspension Support	20-SDMS-02 Fig. 0		
44	6	Anchor Shackle	20-SDMS-02 Fig. 2		
45	1	Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu70mm2 Al.	20-SDMS-02		
46	2	Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu120mm2 Al.	20-SDMS-02		
47	2	Suspension Insulator (Single)	15-SDMS-01 Clause 4.2.5		
48	3 Set	Suspension Insulator	15-SDMS-01 Clause 4.2.5		
49	5	Clevis Eye Extension	20-SDMS-02 Fig. 2		
50	3	Double Arming Plate	20-SDMS-02 Fig. 0		
51	3	Strain Clamp 3 U-Bolts type for Merlin	20-SDMS-02 Fig. 2		
52	3	Parallel Groove clamp 3 Bolts type for Merlin ACSR/AW 170mm2	20-SDMS-02 Fig. 3		
53	1	Parallel Groove clamp 2 bolts type for Quail ACSR/AW 67.44mm2	20-SDMS-02 Fig. 3		
54	2 Set	Phasing Plates (A,B,C).	20-SDMS-02 Fig. 5		
55	6	Phasing Plates Mounting Brackets.	20-SDMS-02 Fig. 5		
56	1 Set	Danger Sign Plate Complete With Its Accessories	20-SDMS-02 Fig. 4		
57	1 Set	Danger Sign Mounting Brackets	20-SDMS-02 Fig. 5		
58	15M	Anti-Climbing Divice, Barbed Wire	20-SDMS-02 Fig. 1		
59	2	Buckle Type, Locking Clip for Barbed Wire	20-SDMS-02 Fig. 1		
60	1 Set	L.T One Stay Assembly On PMT -Structure/200 (Optional)	SDCS-01 Drw. 3		
61	1 Set	M.V-S.C Two Stay Assembly	SDCS-01 Drw. 3		
62	29M	Stay wire 7/4, 12mm Dia, HDG Steel UTS 101kN Min.	SDCS-01		
63	13M	Stay wire 7/3.25, 9.8mm Dia, HDG Steel UTS 65kN Min. (Optional)	SDCS-01		
64	1	Pole Numbering Base Plate	20-SDMS-02 Fig. 5		
65	1 Set	Pole Numbering Plates	20-SDMS-02 Fig. 5		
66	1	Equipment Numbering Base Plate	20-SDMS-02 Fig. 5		
67	1 Set	Equipment Numbering Plates	20-SDMS-02 Fig. 5		
68	8	Terminal Lugs for Cable 4X185mm2 Al.	12-SDMS-02 Fig. 4		
69	6	Terminal Lugs for Quadruplex Cable 4X120mm2 Al.	12-SDMS-02 Fig. 4		

DRW.183A2/2-SINGLE POLE MOUNTED TRANSFORMER 50kVA ON 12M M.V TERMINAL STRUCTURE WITH STAYS & PMT CABINET



## الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFEREN	ICES
01	1	OC12S-12 Meter Steel Pole, HDG, Single Circuit	20-SDMS-01	Page 34
02	2	Crossarm-L 100x100x12x2400mm L.G.	20-SDMS-02	Fig. 1
03	1	Fuse Cut—Out Mounting Channel—Single Pole 125x65x65x6x2400mm L.G.	20-SDMS-02	Fig.
04	2	Brace-L 50x50x4x828mm L.G.	20-SDMS-02	Fig. 4
05	2	Brace-L 50x50x4x828mm L.G. With One End Clipped	20-SDMS-02	Fig. 4
06	2	Brace-L 50x50x4x828mm L.G. With Both End Clipped	20-SDMS-02	Fig.
07	1	Line Post Insulator	15-SDMS-01	Clause 4.2.8
08	1 Set	Performed Line Post Insulator Top Tie for Quail.	20-SDMS-02	Fig. 35
09	2	Strain Clamp straight line deadend type for Quadruplex	20-SDMS-02	Fig. 30
10	1	Strain Clamp straight line deadend type for Quail ACSR	20-SDMS-02	Fig. 30
11	12	Machine Bolt, M20x60mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
12	4	Machine Bolt, M20x225mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
13	1	Machine Bolt, M20x265mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
14	2	Machine Bolt, M20x310mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
15	2	Machine Bolt, M20x365mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
16	1	Machine Bolt, M16x275mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
17	3	Parallel Groove Compression Connector for Merlin — Quail	20-SDMS-02	Fig. 39
18	1	Transformer, 100KVA	51-SDMS-01	
19	3	Fuse Cut-Out (Complete Assembly)	34-SDMS-01	
20	3	Terminal Plug For 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 42
21	9	Terminal Lug for 35mm2 Cu.	20-SDMS-02	Fig. 46
22	3	Surge Arrester	35-SDMS-01	
23	15M	70mm2 Copper. Bare Conductor		
24	15M	Quail Conductor, 67.44mm2 ACSR/AW	10-SDMS-01	
25	9М	Copper Conductor, Insulated Stranded 35mm2 Soft Drawn		
26	3	35mm2 Cu. Flexible Cored Wire with Lugs	20-SDMS-02	
27	2	Crimpit Cu. Connector for 70mm2	20-SDMS-02	Fig. 45
28	1	Ground Wire Guard	20-SDMS-02	Fig. 47
29	1	P.M.T. Cabinet 400A	31-SDMS-03	
30	4M	Cable Al. — 4x185mm2 Main Incoming	11-SDMS-01	
31	2	Cable Tie	20-SDMS-02	Fig. 63
32	6	Insulated Type Sleeve for Connecting Quadruplex/120mm2-120mm2	20-SDMS-02	Fig. 34
33	10M	Stainless Steel Strap Band	20-SDMS-02	Fig. 55
34	10	Buckle for Stainless Steel Strap Band	20-SDMS-02	Fig. 55
35	3М	Rigid PVC Sleeve for Stainless Steel Strap	20-SDMS-02	Fig. 55

DRW.183B1/2-SINGLE POLE MOUNTED TRANSFORMER 100kVA ON 12M M.V TERMINAL STRUCTURE WITH STAYS & PMT CABINET



# الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL	QTY BILL OF MATERIALS DESCRIPTION REFERENCES			
NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFERENCES	
36	11	Terminal Lug for 70mm2 Cu. Cable	12-SDMS-02	
37	18M	Copper Conductor Insulated Stranded 70mm2 Soft Drawn		
38	18M	Quadruplex Cable 120mm2	11-SDMS-02	
39	2	Polyethelene Rigid Pipe, 3 Mtrs. 70mm O.D. 3mm Thickness	20-SDMS-02	
40	2	Weather Head, Al. for 70mm O.D. PVC 3mm Thickness	20-SDMS-02	
41	2	Flexible Pipe, 1Mtr. for 70mm O.D. PVC Rigid Pipe for Outgoing Cable	20-SDMS-02	
42	1	Flexible Pipe, 4 Mtrs, 75mm ID. for 4x185mm2 Incoming Cable	20-SDMS-02	
43	2	Earth Wire Suspension Support	20-SDMS-02 Fig. (	05
44	6	Anchor Shackle	20-SDMS-02 Fig. 2	20
45	1	Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu70mm2 Al.	20-SDMS-02	
46	2	Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu120mm2 Al.	20-SDMS-02	
47	2	Suspension Insulator (Single)	15-SDMS-01 Claus 4.2.5	se
48	3 Set	Suspension Insulator	15-SDMS-01 Claus 4.2.5	
49	5	Clevis Eye Extension	20-SDMS-02 Fig. 2	
50	3	Double Arming Plate	20-SDMS-02 Fig. (	07
51	3	Strain Clamp 3 U-Bolts type for Merlin	20-SDMS-02 Fig. 2	29
52	3	Parallel Groove clamp 3 Bolts type for Merlin ACSR/AW 170mm2	20-SDMS-02 Fig. 3	39
53	1	Parallel Groove clamp 2 bolts type for Quail ACSR/AW 67.44mm2	20-SDMS-02 Fig. 3	39
54	2 Set	Phasing Plates (A,B,C).	20-SDMS-02 Fig. 5	53
55	6	Phasing Plates Mounting Brackets.	20-SDMS-02 Fig. 5	54
56	1 Set	Danger Sign Plate Complete With Its Accessories	20-SDMS-02 Fig. 4	49
57	1 Set	Danger Sign Mounting Brackets	20-SDMS-02 Fig. 9	50
58	15M	Anti-Climbing Divice, Barbed Wire	20-SDMS-02 Fig.	13
59	2	Buckle Type, Locking Clip for Barbed Wire	20-SDMS-02 Fig.	13
60	1 Set	L.T One Stay Assembly On PMT -Structure/200 (Optional)	SDCS-01 Drw. 3	321
61	1 Set	M.V-S.C Two Stay Assembly	SDCS-01 Drw. 3	313
62	29M	Stay wire 7/4, 12mm Dia, HDG Steel UTS 101kN Min.	SDCS-01	
63	13M	Stay wire 7/3.25, 9.8mm Dia, HDG Steel UTS 65kN Min. (Optional)	SDCS-01	
64	1	Pole Numbering Base Plate	20-SDMS-02 Fig. 5	51
65	1 Set	Pole Numbering Plates	20-SDMS-02 Fig. 5	51
66	1	Equipment Numbering Base Plate	20-SDMS-02 Fig. 5	 52
67	1 Set	Equipment Numbering Plates	20-SDMS-02 Fig. 5	52
68	8	Terminal Lugs for Cable 4X185mm2 Al.	12-SDMS-02 Fig. 4	4
69	6	Terminal Lugs for Quadruplex Cable 4X120mm2 Al.	12-SDMS-02 Fig. 4	4
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DRW.183B2/2-SINGLE POLE MOUNTED TRANSFORMER 100kVA ON 12M M.V TERMINAL STRUCTURE WITH STAYS & PMT CABINET

# Saudi Electricity Company الشركة السعودية للكهرباء SDCS-01 SEC DISTRIBUTION CONSTRUCTION STANDARDS DATE: DECEMBER 2005G 50/100kVA PMT ON 13M POLE SINGLE POLE TRANSFORMER STRUCTURE

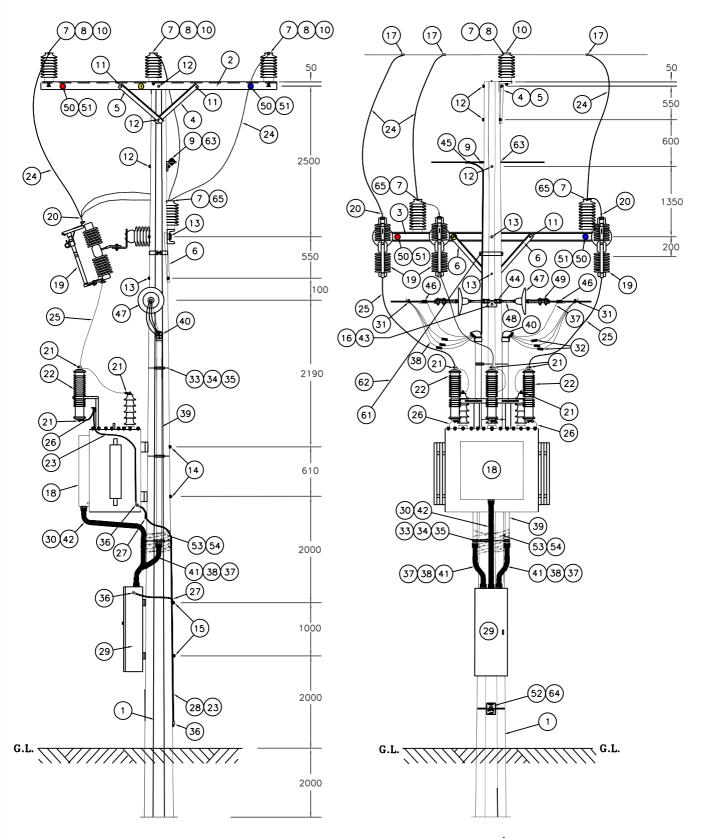


### الشركة السعودية للكهرباء

SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G



DRW.184-SINGLE POLE MOUNTED TRANSFORMER 50/100kVA ON 13M M.V INTERMEDIATE STRUCTURE (0°-5°) WITH PMT CABINET

ALL DIMENSIONS ARE IN MILLIMETER



## الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFEREN	ICES
01	1	OC13S-13 Meter Steel Pole, HDG, Single Circuit	20-SDMS-01	Page 35
02	1	Crossarm-L 100x100x12x2400mm L.G.	20-SDMS-02	Fig. 1
03	1	Fuse Cut—Out Mounting Channel—Single Pole 125x65x65x6x2400mm L.G.	20-SDMS-02	Fig.
04	1	Brace-L 50x50x4x828mm L.G.	20-SDMS-02	Fig. 4
05	1	Brace-L 50x50x4x828mm L.G. With One End Clipped	20-SDMS-02	Fig. 4
06	2	Brace-L 50x50x4x828mm L.G. With Both End Clipped	20-SDMS-02	Fig.
07	5	Line Post Insulator	15-SDMS-01	Clause 4.2.8
08	3 Set	Preformed Armour Rods For 170.5mm2 ACSR/AW (Merlin)	20-SDMS-02	Fig. 38
09	1 Set	Preformed Armour Rod for 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 38
10	3 Set	Preformed Line Post Insulator Top Tie for Merlin With Armour	20-SDMS-02	Fig. 35
11	4	Machine Bolt, M20x60mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
12	3	Machine Bolt, M20x225mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
13	2	Machine Bolt, M20x265mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
14	2	Machine Bolt, M20x325mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
15	2	Machine Bolt, M20x380mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
16	1	Machine Bolt, M16x275mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
17	3	Parallel Groove Compression Connector for Merlin — Quail	20-SDMS-02	Fig. 39
18	1	Transformer, 50KVA	51-SDMS-01	
19	3	Fuse Cut-Out (Complete Assembly)	34-SDMS-01	
20	3	Terminal Plug For 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 42
21	9	Terminal Lug for 35mm2 Cu.	12-SDMS-02	Fig. 1
22	3	Surge Arrester	35-SDMS-01	
23	15M	70mm2 Cu. Bare Conductor		
24	18M	Quail Conductor, 67.44mm2 ACSR/AW	10-SDMS-01	
25	9М	Cu. Conductor, Insulated Stranded 35mm2 Soft Drawn		
26	3	35mm2 Cu. Flexible Cored Wire with Lugs	20-SDMS-02	
27	2	Crimpit Cu. Connector for 70mm2	20-SDMS-02	Fig. 45
28	1	Ground Wire Guard	20-SDMS-02	Fig. 47
29	1	P.M.T. Cabinet 400A	31-SDMS-03	
30	4M	Cable Al. — 4x185mm2 Main Incoming	11-SDMS-01	
31	2	Cable Tie	20-SDMS-02	Fig. 63
32	6	Insulated Type Sleeve for Connecting Quadruplex/120mm2—120mm2	20-SDMS-02	Fig. 34
33	10M	Stainless Steel Strap Band	20-SDMS-02	Fig. 55
34	10	Buckle for Stainless Steel Strap Band	20-SDMS-02	Fig. 55
35	3M	Rigid PVC Sleeve for Stainless Steel Strap	20-SDMS-02	Fig. 55

DRW.184A1/2-SINGLE POLE MOUNTED TRANSFORMER 50kVA ON 13M M.V INTERMEDIATE STRUCTURE (0°-5°) WITH PMT CABINET

TRSP1A



# الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFEREN	CES
36	11	Terminal Lug 70mm2 Cu. Cable	12-SDMS-02	
37	18M	Cu. Conductor Insulated Stranded 70mm2 Soft Drawn		
38	18M	Quadruplex Cable 120mm2 Al.	11-SDMS-02	
39	2	Polyethelene Rigid Pipe, 3 Mtrs. 70mm O.D. 3mm Thickness	20-SDMS-02	
40	2	Weather Head, Al. for 70mm O.D. PVC 3mm Thickness	20-SDMS-02	
41	2	Flexible Pipe, 1Mtr. 70mm O.D. PVC Rigid Pipe for Outgoing Cable	20-SDMS-02	
42	1	Flexible Pipe, 4 Mtrs. 75mm I.D for 4x185mm2 Incoming Cable	20-SDMS-02	
43	1	Earth Wire Suspension Support	20-SDMS-02	Fig. 05
44	2	Anchore Shackle	20-SDMS-02	Fig. 20
45	1	Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu70mm2 Al.	20-SDMS-02	
46	2	Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu120mm2 Al.	20-SDMS-02	
47	2	Suspension Insulator	15-SDMS-01	Clause 4.2.5
48	2	Clevis Eye Extension	20-SDMS-02	Fig. 21
49	2	Strain Clamp, Straight Line Deadend Type for Quadruplex	20-SDMS-02	Fig. 30
50	2 Set	Phasing Plates (A,B,C).	20-SDMS-02	Fig. 53
51	6	Phasing Plates Mounting Brackets.	20-SDMS-02	Fig. 54
52	1 Set	Danger Sign Plate Complete With Its Accessories	20-SDMS-02	Fig. 49
53	16M	Anti-Climbing Divice, Barbed Wire	20-SDMS-02	Fig. 13
54	2	Buckle Type, Locking Clip for Barbed Wire	20-SDMS-02	Fig. 13
55	1	Pole Numbering Base Plate	20-SDMS-02	Fig. 51
56	1 Set	Pole Numbering Plates	20-SDMS-02	Fig. 51
57	1	Equipment Numbering Base Plate	20-SDMS-02	Fig. 52
58	1 Set	Equipment Numbering Plates	20-SDMS-02	Fig. 52
59	8	Terminal Lugs for Cable 4X185mm2 Al.	12-SDMS-02	Fig. 4
60	6	Terminal Lugs for Quadruplex Cable 4X120mm2 Al.	12-SDMS-02	Fig. 4
61	1 Set	L.T One Stay assembly On PMT-Structure/200 (Optional)	SDCS-01	Drw. 310
62	13M	Stay wire 7/3.25, 9.8mm Dia, HDG steel, UTS 65kN Min. (Optional)	SDCS-01	
63	1	Earthwire Support Plate, L 110x110x10x150mm Lg.	20-SDMS-02	Fig. 6
64	1 Set	Danger Sign Mounting Brackets	20-SDMS-02	Fig. 50
65	2	Performed Line Post Insulator Top Tie for Quail.	20-SDMS-02	Fig. 35

DRW.184A2/2-SINGLE POLE MOUNTED TRANSFORMER 50kVA ON 13M M.V INTERMEDIATE STRUCTURE (0°-5°) WITH PMT CABINET



# الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFEREN	REFERENCES	
01	1	OC13S-13 Meter Steel Pole, HDG, Single Circuit	20-SDMS-01	Page 35	
02	1	Crossarm-L 100x100x12x2400mm L.G.	20-SDMS-02	Fig. 1	
03	1	Fuse Cut-Out Mounting Channel-Single Pole 125x65x65x6x2400mm L.G.	20-SDMS-02	Fig.	
04	1	Brace-L 50x50x4x828mm L.G.	20-SDMS-02	Fig. 4	
05	1	Brace—L 50x50x4x828mm L.G. With One End Clipped	20-SDMS-02	Fig. 4	
06	2	Brace—L 50x50x4x828mm L.G. With Both End Clipped	20-SDMS-02	Fig.	
07	5	Line Post Insulator	15-SDMS-01	Clause 4.2.8	
80	3 Set	Preformed Armour Rods For 170.5mm2 ACSR/AW (Merlin)	20-SDMS-02	Fig. 38	
09	1 Set	Preformed Armour Rod for 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 38	
10	3 Set	Preformed Line Post Insulator Top Tie for Merlin With Armour	20-SDMS-02	Fig. 35	
11	4	Machine Bolt, M20x60mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15	
12	3	Machine Bolt, M20x225mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15	
13	2	Machine Bolt, M20x265mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15	
14	2	Machine Bolt, M20x325mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15	
15	2	Machine Bolt, M20x380mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15	
16	1	Machine Bolt, M16x275mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15	
17	3	Parallel Groove Compression Connector for Merlin — Quail	20-SDMS-02	Fig. 39	
18	1	Transformer, 100kVA	51-SDMS-01		
19	3	Fuse Cut—Out (Complete Assembly)	34-SDMS-01		
20	3	Terminal Plug For 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 42	
21	9	Terminal Lug for 35mm2 Cu.	12-SDMS-02	Fig. 1	
22	3	Surge Arrester	35-SDMS-01		
23	15M	70mm2 Cu. Bare Conductor			
24	18M	Quail Conductor, 67.44mm2 ACSR/AW	10-SDMS-01		
25	9М	Cu. Conductor, Insulated Stranded 35mm2 Soft Drawn			
26	3	35mm2 Cu. Flexible Cored Wire with Lugs	20-SDMS-02		
27	2	Crimpit Cu. Connector for 70mm2	20-SDMS-02	Fig. 45	
28	1	Ground Wire Guard	20-SDMS-02	Fig. 47	
29	1	P.M.T. Cabinet 400A	31-SDMS-03		
30	4M	Cable Al. — 4x185mm2 Main Incoming	11-SDMS-01		
31	2	Cable Tie	20-SDMS-02	Fig. 63	
32	6	Insulated Type Sleeve for Connecting Quadruplex/120mm2—120mm2	20-SDMS-02	Fig. 34	
33	10M	Stainless Steel Strap Band	20-SDMS-02	Fig. 55	
34	10	Buckle for Stainless Steel Strap Band	20-SDMS-02	Fig. 55	
35	3M	Rigid PVC Sleeve for Stainless Steel Strap	20-SDMS-02	Fig. 55	

DRW.184B1/2-SINGLE POLE MOUNTED TRANSFORMER 100kVA ON 13M M.V INTERMEDIATE STRUCTURE (0°-5°) WITH PMT CABINET



# الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFERENCES	
36	11	Terminal Lug 70mm2 Cu. Cable	12-SDMS-02	
37	18M	Cu. Conductor Insulated Stranded 70mm2 Soft Drawn		
38	18M	Quadruplex Cable 120mm2 Al.	11-SDMS-02	
39	2	Polyethelene Rigid Pipe, 3 Mtrs. 70mm O.D. 3mm Thickness	20-SDMS-02	
40	2	Weather Head, Al. for 70mm O.D. PVC 3mm Thickness	20-SDMS-02	
41	2	Flexible Pipe, 1Mtr. 70mm O.D. PVC Rigid Pipe for Outgoing Cable	20-SDMS-02	
42	1	Flexible Pipe, 4 Mtrs. 75mm I.D for 4x185mm2 Incoming Cable	20-SDMS-02	
43	1	Earth Wire Suspension Support	20-SDMS-02	Fig. 05
44	2	Anchore Shackle	20-SDMS-02	Fig. 20
45	1	Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu70mm2 Al.	20-SDMS-02	
46	2	Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu120mm2 Al.	20-SDMS-02	
47	2	Suspension Insulator	15-SDMS-01	Clause 4.2.5
48	2	Clevis Eye Extension	20-SDMS-02	Fig. 21
49	2	Strain Clamp, Straight Line Deadend Type for Quadruplex	20-SDMS-02	Fig. 30
50	2 Set	Phasing Plates (A,B,C).	20-SDMS-02	Fig. 53
51	6	Phasing Plates Mounting Brackets.	20-SDMS-02	Fig. 54
52	1 Set	Danger Sign Plate Complete With Its Accessories	20-SDMS-02	Fig. 49
53	16M	Anti-Climbing Divice, Barbed Wire	20-SDMS-02	Fig. 13
54	2	Buckle Type, Locking Clip for Barbed Wire	20-SDMS-02	Fig. 13
55	1	Pole Numbering Base Plate	20-SDMS-02	Fig. 51
56	1 Set	Pole Numbering Plates	20-SDMS-02	Fig. 51
57	1	Equipment Numbering Base Plate	20-SDMS-02	Fig. 52
58	1 Set	Equipment Numbering Plates	20-SDMS-02	Fig. 52
59	8	Terminal Lugs for Cable 4X185mm2 Al.	12-SDMS-02	Fig. 4
60	6	Terminal Lugs for Quadruplex Cable 4X120mm2 Al.	12-SDMS-02	Fig. 4
61	1 Set	L.T One Stay assembly On PMT-Structure/200 (Optional)	SDCS-01	Drw. 310
62	13M	Stay wire 7/3.25, 9.8mm Dia, HDG steel, UTS 65kN Min. (Optional)	SDCS-01	
63	1	Earthwire Support Plate, L 110x110x10x150mm Lg.	20-SDMS-02	Fig. 6
64	1 Set	Danger Sign Mounting Brackets	20-SDMS-02	Fig. 50
65	2	Performed Line Post Insulator Top Tie for Quail.	20-SDMS-02	Fig. 35

DRW.184B2/2-SINGLE POLE MOUNTED TRANSFORMER 100kVA ON 13M M.V INTERMEDIATE STRUCTURE (0°-5°) WITH PMT CABINET

TRSP1B

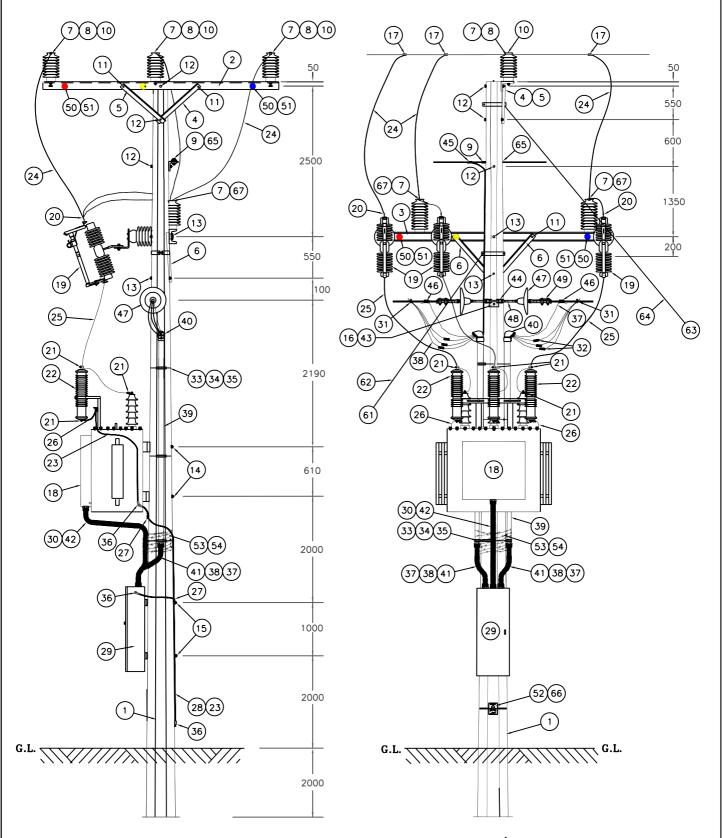


### الشركة السعودية للكهرباء

SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G



DRW.185-SINGLE POLE MOUNTED TRANSFORMER 50/100kVA ON 13M M.V LIGHT ANGLE STRUCTURE (6°-15°) WITH PMT CABINET

ALL DIMENSIONS ARE IN MILLIMETER



## الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFERENCES	
01	1	OC13S-13 Meter Steel Pole, HDG, Single Circuit	20-SDMS-01	Page 35
02	1	Crossarm-L 100x100x12x2400mm L.G.	20-SDMS-02	Fig. 1
03	1	Fuse Cut-Out Mounting Channel-Single Pole 125x65x65x6x2400mm L.G.	20-SDMS-02	Fig.
04	1	Brace-L 50x50x4x828mm L.G.	20-SDMS-02	Fig. 4
05	1	Brace-L 50x50x4x828mm L.G. With One End Clipped	20-SDMS-02	Fig. 4
06	2	Brace-L 50x50x4x828mm L.G. With Both End Clipped	20-SDMS-02	Fig.
07	5	Line Post Insulator	15-SDMS-01	Clause 4.2.8
80	3 Set	Preformed Armour Rods For 170.5mm2 ACSR/AW (Merlin)	20-SDMS-02	Fig. 38
09	1 Set	Preformed Armour Rod for 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 38
10	3 Set	Preformed Line Post Insulator Side Tie for Merlin With Armour	20-SDMS-02	Fig. 35
11	4	Machine Bolt, M20x60mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
12	3	Machine Bolt, M20x225mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
13	2	Machine Bolt, M20x265mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
14	2	Machine Bolt, M20x325mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
15	2	Machine Bolt, M20x380mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
16	1	Machine Bolt, M16x275mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
17	3	Parallel Groove Compression Connector for Merlin — Quail	20-SDMS-02	Fig. 39
18	1	Transformer, 50KVA	51-SDMS-01	
19	3	Fuse Cut-Out (Complete Assembly)	34-SDMS-01	
20	3	Terminal Plug For 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 42
21	9	Terminal Lug for 35mm2 Cu.	12-SDMS-02	Fig. 1
22	3	Surge Arrester	35-SDMS-01	
23	15M	70mm2 Cu. Bare Conductor		
24	18M	Quail Conductor, 67.44mm2 ACSR/AW	10-SDMS-01	
25	9М	Cu. Conductor, Insulated Stranded 35mm2 Soft Drawn		
26	3	35mm2 Cu. Flexible Cored Wire with Lugs	20-SDMS-02	
27	2	Crimpit Cu. Connector for 70mm2	20-SDMS-02	Fig. 45
28	1	Ground Wire Guard	20-SDMS-02	Fig. 47
29	1	P.M.T. Cabinet 400A	31-SDMS-03	
30	4M	Cable Al. — 4x185mm2 Main Incoming	11-SDMS-01	
31	2	Cable Tie	20-SDMS-02	Fig. 63
32	6	Insulated Type Sleeve for Connecting Quadruplex/120mm2-120mm2	20-SDMS-02	Fig. 34
33	10M	Stainless Steel Strap Band	20-SDMS-02	Fig. 55
34	10	Buckle for Stainless Steel Strap Band	20-SDMS-02	Fig. 55
35	3м	Rigid PVC Sleeve for Stainless Steel Strap	20-SDMS-02	Fig. 55

DRW.185A1/2-SINGLE POLE MOUNTED TRANSFORMER 50kVA ON 13M M.V LIGHT ANGLE STRUCTURE (6°-15°) WITH PMT CABINET

TRSP1A



# الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFERENCES	
36	11	Terminal Lug 70mm2 Cu. Cable	12-SDMS-02	
37	18M	Cu. Conductor Insulated Stranded 70mm2 Soft Drawn		
38	18M	Quadruplex Cable 120mm2 Al.	11-SDMS-02	
39	2	Polyethelene Rigid Pipe, 3 Mtrs. 70mm O.D. 3mm Thickness	20-SDMS-02	
40	2	Weather Head, Al. for 70mm O.D. PVC 3mm Thickness	20-SDMS-02	
41	2	Flexible Pipe, 1Mtr. 70mm O.D. PVC Rigid Pipe for Outgoing Cable	20-SDMS-02	
42	1	Flexible Pipe, 4 Mtrs. 75mm I.D for 4x185mm2 Incoming Cable	20-SDMS-02	
43	1	Earth Wire Suspension Support	20-SDMS-02	Fig. 05
44	2	Anchore Shackle	20-SDMS-02	Fig. 20
45	1	Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu70mm2 Al.	20-SDMS-02	
46	2	Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu120mm2 Al.	20-SDMS-02	
47	2	Suspension Insulator	15-SDMS-01	Clause 4.2.5
48	2	Clevis Eye Extension	20-SDMS-02	Fig. 21
49	2	Strain Clamp, Straight Line Deadend Type for Quadruplex	20-SDMS-02	Fig. 30
50	2 Set	Phasing Plates (A,B,C).	20-SDMS-02	Fig. 53
51	6	Phasing Plates Mounting Brackets.	20-SDMS-02	Fig. 54
52	1 Set	Danger Sign Plate Complete With Its Accessories	20-SDMS-02	Fig. 49
53	16M	Anti-Climbing Device, Barbed Wire	20-SDMS-02	Fig. 13
54	2	Buckle Type, Locking Clip for Barbed Wire	20-SDMS-02	Fig. 13
55	1	Pole Numbering Base Plate	20-SDMS-02	Fig. 51
56	1 Set	Pole Numbering Plates	20-SDMS-02	Fig. 51
57	1	Equipment Numbering Base Plate	20-SDMS-02	Fig. 52
58	1 Set	Equipment Numbering Plates	20-SDMS-02	Fig. 52
59	8	Terminal Lugs for Cable 4X185mm2 Al.	12-SDMS-02	Fig. 4
60	6	Terminal Lugs for Quadruplex Cable 4X120mm2 Al.	12-SDMS-02	Fig. 4
61	1 Set	L.T One Stay assembly On PMT-Structure/200 (Optional)	SDCS-01	Drw. 310
62	13M	Stay wire 7/3.25, 9.8mm Dia, HDG steel, UTS 65kN Min. (Optional)	SDCS-01	
63	1 Set	M.V-S.C One Stay assembly	SDCS-01	Drw. 312
64	16M	Stay wire 7/4, 12mm Dia, HDG steel, UTS 101kN Min.	SDCS-01	
65	1	Earthwire Support Plate, L 110x110x10x150mm Lg.	20-SDMS-02	Fig. 6
66	1 Set	Danger Sign Mounting Brackets	20-SDMS-02	Fig. 50
67	2	Performed Line Post Insulator Top Tie for Quail.	20-SDMS-02	Fig. 35

DRW.185A2/2-SINGLE POLE MOUNTED TRANSFORMER 50kVA ON 13M M.V LIGHT ANGLE STRUCTURE (6°-15°) WITH PMT CABINET



# الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFEREN	ICES
01	1	OC13S-13 Meter Steel Pole, HDG, Single Circuit	20-SDMS-01	Page 35
02	1	Crossarm-L 100x100x12x2400mm L.G.	20-SDMS-02	Fig. 1
03	1	Fuse Cut—Out Mounting Channel—Single Pole 125x65x65x6x2400mm L.G.	20-SDMS-02	Fig.
04	1	Brace-L 50x50x4x828mm L.G.	20-SDMS-02	Fig. 4
05	1	Brace-L 50x50x4x828mm L.G. With One End Clipped	20-SDMS-02	Fig. 4
06	2	Brace—L 50x50x4x828mm L.G. With Both End Clipped	20-SDMS-02	Fig.
07	5	Line Post Insulator	15-SDMS-01	Clause 4.2.8
08	3 Set	Preformed Armour Rods For 170.5mm2 ACSR/AW (Merlin)	20-SDMS-02	Fig. 38
09	1 Set	Preformed Armour Rod for 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 38
10	3 Set	Preformed Line Post Insulator Side Tie for Merlin With Armour	20-SDMS-02	Fig. 35
11	4	Machine Bolt, M20x60mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
12	3	Machine Bolt, M20x225mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
13	2	Machine Bolt, M20x265mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
14	2	Machine Bolt, M20x325mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
15	2	Machine Bolt, M20x380mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
16	1	Machine Bolt, M16x275mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
17	3	Parallel Groove Compression Connector for Merlin — Quail	20-SDMS-02	Fig. 39
18	1	Transformer, 100KVA	51-SDMS-01	
19	3	Fuse Cut-Out (Complete Assembly)	34-SDMS-01	
20	3	Terminal Plug For 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 42
21	9	Terminal Lug for 35mm2 Cu.	12-SDMS-02	Fig. 1
22	3	Surge Arrester	35-SDMS-01	
23	15M	70mm2 Cu. Bare Conductor		
24	18M	Quail Conductor, 67.44mm2 ACSR/AW	10-SDMS-01	
25	9М	Cu. Conductor, Insulated Stranded 35mm2 Soft Drawn		
26	3	35mm2 Cu. Flexible Cored Wire with Lugs	20-SDMS-02	
27	2	Crimpit Cu. Connector for 70mm2	20-SDMS-02	Fig. 45
28	1	Ground Wire Guard	20-SDMS-02	Fig. 47
29	1	P.M.T. Cabinet 400A	31-SDMS-03	
30	4M	Cable Al. — 4x185mm2 Main Incoming	11-SDMS-01	
31	2	Cable Tie	20-SDMS-02	Fig. 63
32	6	Insulated Type Sleeve for Connecting Quadruplex/120mm2—120mm2	20-SDMS-02	Fig. 34
33	10M	Stainless Steel Strap Band	20-SDMS-02	Fig. 55
34	10	Buckle for Stainless Steel Strap Band	20-SDMS-02	Fig. 55
35	3M	Rigid PVC Sleeve for Stainless Steel Strap	20-SDMS-02	Fig. 55

DRW.185B1/2-SINGLE POLE MOUNTED TRANSFORMER 100kVA ON 13M M.V LIGHT ANGLE STRUCTURE (6°-15°) WITH PMT CABINET

TRSP1A



# الشركة السعودية للكهرباء

## SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL	QTY	BILL OF MATERIALS DESCRIPTION	neppne	ICEC
NO.	,		REFEREN	ICES
36	11	Terminal Lug 70mm2 Cu. Cable	12-SDMS-02	
37	18M	Cu. Conductor Insulated Stranded 70mm2 Soft Drawn	44 00000 00	
38	18M	Quadruplex Cable 120mm2 Al.	11-SDMS-02	
39	2	Polyethelene Rigid Pipe, 3 Mtrs. 70mm O.D. 3mm Thickness	20-SDMS-02	
40	2	Weather Head, Al. for 70mm O.D. PVC 3mm Thickness	20-SDMS-02	
41	2	Flexible Pipe, 1Mtr. 70mm O.D. PVC Rigid Pipe for Outgoing Cable	20-SDMS-02	
42	1	Flexible Pipe, 4 Mtrs. 75mm I.D for 4x185mm2 Incoming Cable	20-SDMS-02	
43	1	Earth Wire Suspension Support	20-SDMS-02	Fig. 05
44	2	Anchore Shackle	20-SDMS-02	Fig. 20
45	1	Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu70mm2 Al.	20-SDMS-02	
46	2	Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu120mm2 Al.	20-SDMS-02	
47	2	Suspension Insulator	15-SDMS-01	Clause 4.2.5
48	2	Clevis Eye Extension	20-SDMS-02	Fig. 21
49	2	Strain Clamp, Straight Line Deadend Type for Quadruplex	20-SDMS-02	Fig. 30
50	2 Set	Phasing Plates (A,B,C).	20-SDMS-02	Fig. 53
51	6	Phasing Plates Mounting Brackets.	20-SDMS-02	Fig. 54
52	1 Set	Danger Sign Plate Complete With Its Accessories	20-SDMS-02	Fig. 49
53	16M	Anti-Climbing Device, Barbed Wire	20-SDMS-02	Fig. 13
54	2	Buckle Type, Locking Clip for Barbed Wire	20-SDMS-02	Fig. 13
55	1	Pole Numbering Base Plate	20-SDMS-02	Fig. 51
56	1 Set	Pole Numbering Plates	20-SDMS-02	Fig. 51
57	1	Equipment Numbering Base Plate	20-SDMS-02	Fig. 52
58	1 Set	Equipment Numbering Plates	20-SDMS-02	Fig. 52
59	8	Terminal Lugs for Cable 4X185mm2 Al.	12-SDMS-02	Fig. 4
60	6	Terminal Lugs for Quadruplex Cable 4X120mm2 Al.	12-SDMS-02	Fig. 4
61	1 Set	L.T One Stay assembly On PMT—Structure/200 (Optional)	SDCS-01	Drw. 310
62	13M	Stay wire 7/3.25, 9.8mm Dia, HDG steel, UTS 65kN Min. (Optional)	SDCS-01	
63	1 Set	M.V-S.C One Stay assembly	SDCS-01	Drw. 312
64	16M	Stay wire 7/4, 12mm Dia, HDG steel, UTS 101kN Min.	SDCS-01	
65	1	Earthwire Support Plate, L 110x110x10x150mm Lg.	20-SDMS-02	Fig. 6
66	1 Set	Danger Sign Mounting Brackets	20-SDMS-02	Fig. 50
67	2	Performed Line Post Insulator Top Tie for Quail	20-SDMS-02	Fig. 35
	<u> </u>			

DRW.185B2/2-SINGLE POLE MOUNTED TRANSFORMER 100kVA ON 13M M.V LIGHT ANGLE STRUCTURE (6°-15°) WITH PMT CABINET

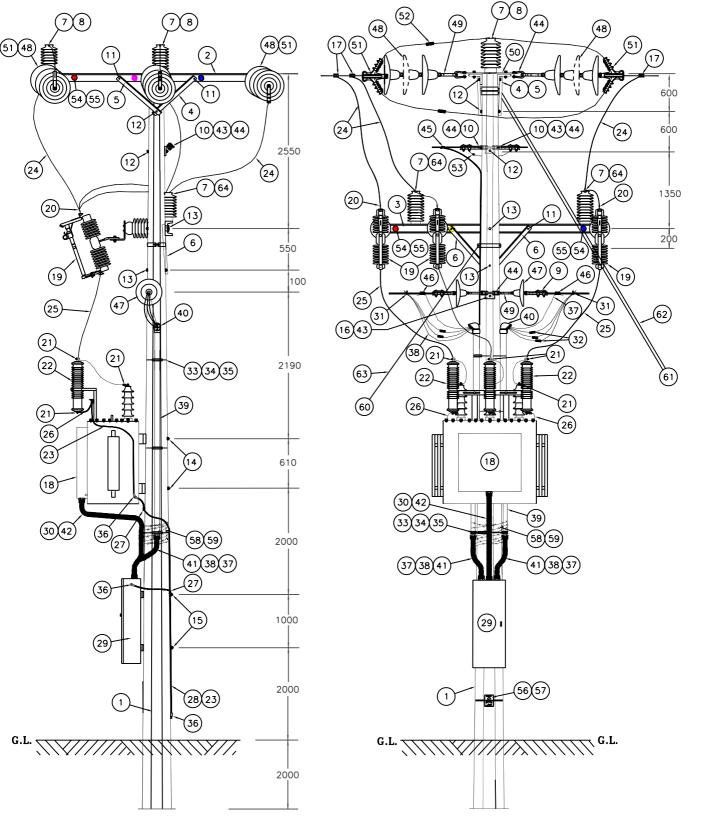


## الشركة السعودية للكهرباء

SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G



DRW.186-SINGLE POLE MOUNTED TRANSFORMER 50/100kVA ON 13M M.V MEDIUM & HEAVY ANGLE STRUCTURE (16°-90°) WITH PMT CABINET

ALL DIMENSIONS ARE IN MILLIMETER



# الشركة السعودية للكهرباء

## SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFEREN	ICES
01	1	OC13S-13 Meter Steel Pole, HDG, Single Circuit	20-SDMS-01	Page 35
02	2	Crossarm-L 100x100x12x2400mm L.G.	20-SDMS-02	Fig. 1
03	1	Fuse Cut—Out Mounting Channel—Single Pole 125x65x65x6x2400mm L.G.	20-SDMS-02	Fig.
04	2	Brace-L 50x50x4x828mm L.G.	20-SDMS-02	Fig. 4
05	2	Brace-L 50x50x4x828mm L.G. With One End Clipped	20-SDMS-02	Fig. 4
06	2	Brace-L 50x50x4x828mm L.G. With Both End Clipped	20-SDMS-02	Fig.
07	4	Line Post Insulator	15-SDMS-01	Clause 4.2.8
08	2 Set	Performed Line Post Insulator Top Tie for Merlin ACSR	20-SDMS-02	Fig. 35
09	2	Strain Clamp straight line deadend type for Quadruplex	20-SDMS-02	Fig. 30
10	2	Strain Clamp straight line deadend type for Quail ACSR	20-SDMS-02	Fig. 30
11	12	Machine Bolt, M20x60mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
12	3	Machine Bolt, M20x225mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
13	2	Machine Bolt, M20x265mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
14	2	Machine Bolt, M20x325mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
15	2	Machine Bolt, M20x380mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
16	1	Machine Bolt, M16x275mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
17	3	Parallel Groove Compression Connector for Merlin — Quail	20-SDMS-02	Fig. 39
18	1	Transformer, 50KVA	51-SDMS-01	
19	3	Fuse Cut—Out (Complete Assembly)	34-SDMS-01	
20	3	Terminal Plug For 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 42
21	9	Terminal Lug for 35mm2 Cu.	20-SDMS-02	Fig. 46
22	3	Surge Arrester	35-SDMS-01	
23	15M	70mm2 Copper. Bare Conductor		
24	18M	Quail Conductor, 67.44mm2 ACSR/AW	10-SDMS-01	
25	9М	Copper Conductor, Insulated Stranded 35mm2 Soft Drawn		
26	3	35mm2 Cu. Flexible Cored Wire with Lugs	20-SDMS-02	
27	2	Crimpit Cu. Connector for 70mm2	20-SDMS-02	Fig. 45
28	1	Ground Wire Guard	20-SDMS-02	Fig. 47
29	1	P.M.T. Cabinet 400A	31-SDMS-03	
30	4M	Cable Al. — 4x185mm2 Main Incoming	11-SDMS-01	
31	2	Cable Tie	20-SDMS-02	Fig. 63
32	6	Insulated Type Sleeve for Connecting Quadruplex/120mm2—120mm2	20-SDMS-02	Fig. 34
33	10M	Stainless Steel Strap Band	20-SDMS-02	Fig. 55
34	10	Buckle for Stainless Steel Strap Band	20-SDMS-02	Fig. 55
35	ЗМ	Rigid PVC Sleeve for Stainless Steel Strap	20-SDMS-02	Fig. 55

DRW.186A1/2-SINGLE POLE MOUNTED TRANSFORMER 50kVA ON 13M M.V MEDIUM & HEAVY ANGLE STRUCTURE (16°-90°) WITH PMT CABINET



# الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

No.	SERIAL	OTEV	DILL OF MATERIALS DESCRIPTION		
37         18M         Copper Conductor Insulated Stranded 70mm2 Soft Drawn           38         18M         Quadruplex Cable 120mm2         11–50           39         2         Polyethelene Rigid Pipe, 3 Mtrs, 70mm O.D. 3mm Thickness         20–50           40         2         Weather Head, A.I. for 70mm O.D. PVC 3mm Thickness         20–50           41         2         Flexible Pipe, 1 Mtr. for 70mm O.D. PVC Rigid Pipe for Outgoing Cable         20–50           42         1         Flexible Pipe, 4 Mtrs, 75mm ID. for 4x185mm2 Incoming Cable         20–50           43         2         Eorth Wire Suspension Support         20–50           44         10         Anchor Shackle         20–50           45         1         Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu.–70mm2 AI.         20–50           46         2         Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu.–120mm2 AI.         20–50           47         2         Suspension Insulator         15–50           48         6 Set         Suspension Insulator         15–50           49         8         Clevis Eye Extension         20–50           50         3         Double Arming Plate         20–50           51         6         Strain Clamp 3 U–Bolts type for Merlin         20–50<	NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFEREN	ICES
11-50		11	Terminal Lug for 70mm2 Cu. Cable	12-SDMS-02	
39         2         Polyethelene Rigid Pipe, 3 Mtrs. 70mm O.D. 3mm Thickness         20–50           40         2         Weather Head, Al. for 70mm O.D. PVC 3mm Thickness         20–50           41         2         Flexible Pipe, 1 Mtr. for 70mm O.D. PVC Rigid Pipe for Outgoing Cable         20–50           42         1         Flexible Pipe, 4 Mtrs. 75mm ID. for 4x185mm2 Incoming Cable         20–50           43         2         Earth Wire Suspension Support         20–50           44         10         Anchor Shackle         20–50           45         1         Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu.–70mm2 Al.         20–50           46         2         Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu.–120mm2 Al.         20–50           47         2         Suspension Insulator (Single)         15–50           48         6 Set         Suspension Insulator         15–50           49         8         Clevis Eye Extension         20–50           50         3         Double Arming Plate         20–50           51         6         Stroin Clamp 3 U–Bolts type for Merlin         20–50           52         3         Parallel Groove Compression Connector for 67.44mm2 ACSR/AW (Merlin-Merlin)         20–50           53         1 <t< td=""><td>37</td><td>18M</td><td>Copper Conductor Insulated Stranded 70mm2 Soft Drawn</td><td></td><td></td></t<>	37	18M	Copper Conductor Insulated Stranded 70mm2 Soft Drawn		
40         2         Weather Head, Al. for 70mm O.D. PVC 3mm Thickness         20-50           41         2         Flexible Pipe, 1Mtr. for 70mm O.D. PVC Rigid Pipe for Outgoing Cable         20-50           42         1         Flexible Pipe, 4 Mtrs, 75mm ID. for 4x185mm2 Incoming Cable         20-50           43         2         Eorth Wire Suspension Support         20-50           44         10         Anchor Shackle         20-50           45         1         Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu70mm2 Al.         20-50           46         2         Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu120mm2 Al.         20-50           47         2         Suspension Insulator (Single)         15-50           48         6 Set Suspension Insulator         15-50           49         8         Clevis Eye Extension         20-50           50         3         Double Arming Plate         20-50           51         6         Strain Clamp 3 U-Bolts type for Merlin         20-50           52         3         Parallel Groove Compression Connector for 170mm2 ACSR/AW (Merlin-Merlin)         20-50           53         1         Parallel Groove Compression Connector for 67.44mm2 ACSR/AW (Quail-Quail)         20-50           54         2         Se	38	18M	Quadruplex Cable 120mm2	11-SDMS-02	
41         2         Flexible Pipe, 1Mtr. for 70mm 0.D. PVC Rigid Pipe for Outgoing Cable         20–50           42         1         Flexible Pipe, 4 Mtrs, 75mm ID. for 4x185mm2 Incoming Cable         20–50           43         2         Earth Wire Suspension Support         20–50           44         10         Anchor Shackle         20–50           45         1         Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu70mm2 Al.         20–50           46         2         Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu120mm2 Al.         20–50           47         2         Suspension Insulator         15–50           48         6 Set Suspension Insulator         15–50           49         8         Clevis Eye Extension         20–50           50         3         Double Arming Plate         20–50           51         6         Strain Clamp 3 U-Bolts type for Merlin         20–50           52         3         Parallel Groove Compression Connector for 170mm2 ACSR/AW (Merlin-Merlin)         20–50           53         1         Parallel Groove Compression Connector for 67,44mm2 ACSR/AW (Quail-Quail)         20–50           54         2         Set Phasing Plates Mounting Brackets.         20–50           55         6         Phasing Plates Mounting	39	2	Polyethelene Rigid Pipe, 3 Mtrs. 70mm O.D. 3mm Thickness	20-SDMS-02	
42         1         Flexible Pipe, 4 Mtrs, 75mm ID, for 4x185mm2 Incoming Cable         20–50           43         2         Earth Wire Suspension Support         20–50           44         10         Anchor Shackle         20–50           45         1         Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu70mm2 Al.         20–50           46         2         Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu120mm2 Al.         20–50           47         2         Suspension Insulator (Single)         15–50           48         6 Set         Suspension Insulator         15–50           49         8         Clevis Eye Extension         20–50           50         3         Double Arming Plate         20–50           51         6         Strain Clamp 3 U-Bolts type for Merlin         20–50           52         3         Parallel Groove Compression Connector for 170mm2 ACSR/AW (Merlin-Merlin)         20–50           53         1         Parallel Groove Compression Connector for 67.44mm2 ACSR/AW (Quail-Quail)         20–50           54         2 Set         Phasing Plates Mounting Brackets.         20–50           55         6         Phasing Plates Mounting Brackets.         20–50           57         1 Set         Danger Sign Plate Complete W	40	2	Weather Head, Al. for 70mm O.D. PVC 3mm Thickness	20-SDMS-02	
43         2         Earth Wire Suspension Support         20–50           44         10         Anchor Shackle         20–50           45         1         Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu70mm2 Al.         20–50           46         2         Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu120mm2 Al.         20–50           47         2         Suspension Insulator (Single)         15–50           48         6         Set         Suspension Insulator         15–50           49         8         Clevis Eye Extension         20–50           50         3         Double Arming Plate         20–50           51         6         Strain Clamp 3 U-Bolts type for Merlin         20–50           52         3         Parallel Groove Compression Connector for 170mm2 ACSR/AW (Merlin-Merlin)         20–50           53         1         Parallel Groove Compression Connector for 67.44mm2 ACSR/AW (Quail-Quail)         20–50           54         2         Set Phasing Plates (A,B,C).         20–50           55         6         Phosing Plates Mounting Brackets.         20–50           57         1         Set Danger Sign Mounting Brackets         20–50           58         16M         Anti-Climbing Device, Barbed Wire <t< td=""><td>41</td><td>2</td><td>Flexible Pipe, 1Mtr. for 70mm O.D. PVC Rigid Pipe for Outgoing Cable</td><td>20-SDMS-02</td><td></td></t<>	41	2	Flexible Pipe, 1Mtr. for 70mm O.D. PVC Rigid Pipe for Outgoing Cable	20-SDMS-02	
44 10 Anchor Shockle  45 1 Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu70mm2 Al.  46 2 Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu120mm2 Al.  47 2 Suspension Insulator (Single)  48 6 Set Suspension Insulator  49 8 Clevis Eye Extension  50 3 Double Arming Plate  50 51 6 Strain Clamp 3 U-Bolts type for Merlin  52 3 Parallel Groove Compression Connector for 170mm2 ACSR/AW (Merlin-Merlin)  53 1 Parallel Groove Compression Connector for 67.44mm2 ACSR/AW (Quail-Quail)  54 2 Set Phosing Plates (A,B,C).  55 6 Phosing Plates Mounting Brackets.  56 1 Set Danger Sign Plate Complete With Its Accessories  57 1 Set Danger Sign Mounting Brackets.  58 16M Anti-Climbing Device, Barbed Wire  59 2 Buckle Type, Locking Clip for Barbed Wire  60 1 Set LT One Stay Assembly On PMT -Structure/200 (Optional)  50 SCS-  61 1 Set M.Y-S.C Two Stay Assembly  62 32M Stay wire 7/4, 12mm Dia, HDG Steel UTS 101kN Min.  50 SCS-  65 1 Set Pole Numbering Base Plate  66 1 Set Pole Numbering Base Plate  67 1 Equipment Numbering Base Plate  68 1 Set Equipment Numbering Base Plate  69 8 Terminal Lugs for Cable 4X185mm2 Al.	42	1	Flexible Pipe, 4 Mtrs, 75mm ID. for 4x185mm2 Incoming Cable	20-SDMS-02	
45 1 Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu70mm2 Al. 20-50 46 2 Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu120mm2 Al. 20-50 47 2 Suspension Insulator (Single) 15-50 48 6 Set Suspension Insulator 20-50 49 8 Clevis Eye Extension 20-50 50 3 Double Arming Plate 20-50 51 6 Strain Clamp 3 U-Bolts type for Merlin 20-50 52 3 Parallel Groove Compression Connector for 170mm2 ACSR/AW (Merlin-Merlin) 20-50 53 1 Parallel Groove Compression Connector for 67.44mm2 ACSR/AW (Quail-Quail) 20-50 54 2 Set Phasing Plates (A,B,C). 20-50 55 6 Phosing Plates Mounting Brackets. 20-50 56 1 Set Danger Sign Plate Complete With Its Accessories 20-50 57 1 Set Danger Sign Mounting Brackets 20-50 58 16M Anti-Climbing Device, Barbed Wire 20-50 59 2 Buckle Type, Locking Clip for Barbed Wire 20-50 60 1 Set L.T One Stay Assembly On PMT -Structure/200 (Optional) 50CS-61 61 Set M.V-S.C Two Stay Assembly 50CS-62 63 13M Stay wire 7/4, 12mm Dia, HDG Steel UTS 101kN Min. 50CS-63 64 2 Performed Line Post Insulator Top Tie for Quail 20-50 65 1 Pole Numbering Base Plate 20-50 66 1 Set Equipment Numbering Plates 20-50 67 1 Equipment Numbering Plates 20-50 68 1 Set Equipment Numbering Plates 20-50 69 8 Terminal Lugs for Cable 4X185mm2 Al. 12-50	43	2	Earth Wire Suspension Support	20-SDMS-02	Fig. 05
46 2 Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu120mm2 Al. 20-50 47 2 Suspension Insulator (Single) 15-50 48 6 Set Suspension Insulator 15-50 49 8 Clevis Eye Extension 20-50 50 3 Double Arming Plate 20-50 51 6 Strain Clamp 3 U-Bolts type for Merlin 20-50 52 3 Parallel Groove Compression Connector for 170mm2 ACSR/AW (Merlin-Merlin) 20-50 53 1 Parallel Groove Compression Connector for 67.44mm2 ACSR/AW (Quail-Quail) 20-50 54 2 Set Phasing Plates (A,B,C). 20-50 55 6 Phasing Plates Mounting Brackets. 20-50 56 1 Set Danger Sign Plate Complete With Its Accessories 20-50 57 1 Set Danger Sign Mounting Brackets 20-50 58 16M Anti-Climbing Device, Barbed Wire 20-50 59 2 Buckle Type, Locking Clip for Barbed Wire 20-50 60 1 Set L.T One Stay Assembly On PMT -Structure/200 (Optional) 50CS-61 61 Set M.V-S.C Two Stay Assembly 50CS-62 63 13M Stay wire 7/4, 12mm Dia, HDG Steel UTS 101kN Min. 50CS-63 64 2 Performed Line Post Insulator Top Tie for Quail 20-50 66 1 Set Pole Numbering Base Plate 20-50 67 1 Equipment Numbering Base Plate 20-50 68 1 Set Equipment Numbering Base Plate 20-50 69 8 Terminal Lugs for Cable 4X185mm2 Al. 12-50	44	10	Anchor Shackle	20-SDMS-02	Fig. 20
47 2 Suspension Insulator (Single)  48 6 Set Suspension Insulator  49 8 Clevis Eye Extension  50 3 Double Arming Plate  51 6 Strain Clamp 3 U-Bolts type for Merlin  52 3 Parallel Groove Compression Connector for 170mm2 ACSR/AW (Merlin-Merlin)  53 1 Parallel Groove Compression Connector for 67.44mm2 ACSR/AW (Quail-Quail)  54 2 Set Phasing Plates (A,B,C).  55 6 Phasing Plates Mounting Brackets.  56 1 Set Danger Sign Plate Complete With Its Accessories  57 1 Set Danger Sign Mounting Brackets  58 16M Anti-Climbing Device, Barbed Wire  59 2 Buckle Type, Locking Clip for Barbed Wire  60 1 Set L.T One Stay Assembly On PMT -Structure/200 (Optional)  50 SDCS-  61 3 Stay wire 7/4, 12mm Dia, HDG Steel UTS 101kN Min.  50 SDCS-  63 13M Stay wire 7/4, 12mm Dia, HDG Steel UTS 65kN Min. (Optional)  64 2 Performed Line Post Insulator Top Tie for Quail  65 1 Pole Numbering Base Plate  66 1 Set Equipment Numbering Base Plate  67 1 Equipment Numbering Base Plate  68 1 Set Equipment Numbering Plates  69 8 Terminal Lugs for Cable 4X185mm2 Al.	45	1	Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu70mm2 Al.	20-SDMS-02	
48 6 Set Suspension Insulator 49 8 Clevis Eye Extension 50 3 Double Arming Plate 51 6 Strain Clamp 3 U-Bolts type for Merlin 52 3 Parallel Groove Compression Connector for 170mm2 ACSR/AW (Merlin-Merlin) 53 1 Parallel Groove Compression Connector for 67.44mm2 ACSR/AW (Quail-Quail) 54 2 Set Phasing Plates (A,B,C). 55 6 Phasing Plates Mounting Brackets. 56 1 Set Danger Sign Plate Complete With Its Accessories 57 1 Set Danger Sign Mounting Brackets 58 16M Anti-Climbing Device, Barbed Wire 59 2 Buckle Type, Locking Clip for Barbed Wire 60 1 Set L.T One Stay Assembly On PMT -Structure/200 (Optional) 50 SDCS- 61 1 Set M.V-S.C Two Stay Assembly 50 Susy wire 7/4, 12mm Dia, HDG Steel UTS 101kN Min. 50 SCS- 61 1 Set Pole Numbering Base Plate 62 1 Set Pole Numbering Base Plate 63 1 Set Equipment Numbering Plates 64 1 Set Equipment Numbering Plates 65 1 Equipment Numbering Plates 66 1 Set Equipment Numbering Plates 67 1 Equipment Numbering Plates 69 8 Terminal Lugs for Cable 4X185mm2 Al.	46	2	Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu120mm2 Al.	20-SDMS-02	
49 8 Clevis Eye Extension 20-50 50 3 Double Arming Plate 20-50 51 6 Strain Clamp 3 U-Bolts type for Merlin 20-50 52 3 Parallel Groove Compression Connector for 170mm2 ACSR/AW (Merlin-Merlin) 20-50 53 1 Parallel Groove Compression Connector for 67.44mm2 ACSR/AW (Quail-Quail) 20-50 54 2 Set Phasing Plates (A,B,C). 20-50 55 6 Phasing Plates Mounting Brackets. 20-50 56 1 Set Danger Sign Plate Complete With Its Accessories 20-50 57 1 Set Danger Sign Mounting Brackets 20-50 58 16M Anti-Climbing Device, Barbed Wire 20-50 59 2 Buckle Type, Locking Clip for Barbed Wire 20-50 60 1 Set L.T One Stay Assembly On PMT -Structure/200 (Optional) 50CS-61 61 1 Set M.V-S.C Two Stay Assembly 50CS-62 32M Stay wire 7/4, 12mm Dia, HDG Steel UTS 101kN Min. 50CS-63 13M Stay wire 7/3.25, 9.8mm Dia, HDG Steel UTS 65kN Min. (Optional) 50CS-64 2 Performed Line Post Insulator Top Tie for Quail 20-50 66 1 Set Pole Numbering Base Plate 20-50 67 1 Equipment Numbering Base Plate 20-50 68 1 Set Equipment Numbering Plates 20-50 68 1 Set Equipment Numbering Plates 20-50 69 8 Terminal Lugs for Cable 4X185mm2 Al. 12-50	47	2	Suspension Insulator (Single)	15-SDMS-01	Clause 4.2.5
50 3 Double Arming Plate 20–50 51 6 Strain Clamp 3 U–Bolts type for Merlin 20–50 52 3 Parallel Groove Compression Connector for 170mm2 ACSR/AW (Merlin–Merlin) 20–50 53 1 Parallel Groove Compression Connector for 67.44mm2 ACSR/AW (Quail–Quail) 20–50 54 2 Set Phosing Plates (A,B,C). 20–50 55 6 Phosing Plates Mounting Brackets. 20–50 56 1 Set Danger Sign Plate Complete With Its Accessories 20–50 57 1 Set Danger Sign Mounting Brackets 20–50 58 16M Anti–Climbing Device, Barbed Wire 20–50 59 2 Buckle Type, Locking Clip for Barbed Wire 20–50 60 1 Set L.T One Stay Assembly On PMT –Structure/200 (Optional) SDCS–61 1 Set M.V–S.C Two Stay Assembly SDCS–62 32M Stay wire 7/4, 12mm Dia, HDG Steel UTS 101kN Min. SDCS–63 13M Stay wire 7/3.25, 9.8mm Dia, HDG Steel UTS 65kN Min. (Optional) SDCS–64 2 Performed Line Post Insulator Top Tie for Quail 20–50 66 1 Set Pole Numbering Base Plate 20–50 67 1 Equipment Numbering Bose Plate 20–50 68 1 Set Equipment Numbering Bose Plate 20–50 69 8 Terminal Lugs for Cable 4X185mm2 Al. 12–50	48	6 Set	Suspension Insulator	15-SDMS-01	Clause 4.2.5
51 6 Strain Clamp 3 U-Bolts type for Merlin 20-Sb 52 3 Parallel Groove Compression Connector for 170mm2 ACSR/AW (Merlin-Merlin) 20-Sb 53 1 Parallel Groove Compression Connector for 67.44mm2 ACSR/AW (Quail-Quail) 20-Sb 54 2 Set Phasing Plates (A,B,C). 20-Sb 55 6 Phasing Plates Mounting Brackets. 20-Sb 56 1 Set Danger Sign Plate Complete With Its Accessories 20-Sb 57 1 Set Danger Sign Mounting Brackets 20-Sb 58 16M Anti-Climbing Device, Barbed Wire 20-Sb 59 2 Buckle Type, Locking Clip for Barbed Wire 20-Sb 60 1 Set L.T One Stay Assembly On PMT -Structure/200 (Optional) SDCS- 61 1 Set M.V-S.C Two Stay Assembly SDCS- 62 32M Stay wire 7/4, 12mm Dia, HDG Steel UTS 101kN Min. SDCS- 63 13M Stay wire 7/4, 12mm Dia, HDG Steel UTS 65kN Min. (Optional) SDCS- 64 2 Performed Line Post Insulator Top Tie for Quail 20-Sb 66 1 Set Pole Numbering Base Plate 20-Sb 67 1 Equipment Numbering Base Plate 20-Sb 68 1 Set Equipment Numbering Plates 20-Sb 69 8 Terminal Lugs for Cable 4X185mm2 Al. 12-Sb	49	8	Clevis Eye Extension	20-SDMS-02	Fig. 21
52 3 Parallel Groove Compression Connector for 170mm2 ACSR/AW (Merlin-Merlin) 20-50 53 1 Parallel Groove Compression Connector for 67.44mm2 ACSR/AW (Quail-Quail) 20-50 54 2 Set Phasing Plates (A,B,C). 20-50 55 6 Phasing Plates Mounting Brackets. 20-50 56 1 Set Danger Sign Plate Complete With Its Accessories 20-50 57 1 Set Danger Sign Mounting Brackets 20-50 58 16M Anti-Climbing Device, Barbed Wire 20-50 59 2 Buckle Type, Locking Clip for Barbed Wire 20-50 60 1 Set L.T One Stay Assembly On PMT -Structure/200 (Optional) 50CS-61 61 1 Set M.V-S.C Two Stay Assembly 50CS-62 63 23M Stay wire 7/4, 12mm Dia, HDG Steel UTS 101kN Min. 50CS-63 63 13M Stay wire 7/3.25, 9.8mm Dia, HDG Steel UTS 65kN Min. (Optional) 50CS-64 65 1 Pole Numbering Base Plate 20-50 66 1 Set Pole Numbering Base Plate 20-50 67 1 Equipment Numbering Base Plate 20-50 68 1 Set Equipment Numbering Plates 20-50 69 8 Terminal Lugs for Cable 4X185mm2 Al. 12-50	50	3	Double Arming Plate	20-SDMS-02	Fig. 07
1 Parallel Groove Compression Connector for 67.44mm2 ACSR/AW (Quail—Quail) 20–SD 25 2 Set Phasing Plates (A,B,C). 20–SD 55 6 Phasing Plates Mounting Brackets. 20–SD 56 1 Set Danger Sign Plate Complete With Its Accessories 20–SD 57 1 Set Danger Sign Mounting Brackets 20–SD 58 16M Anti—Climbing Device, Barbed Wire 20–SD 2 Buckle Type, Locking Clip for Barbed Wire 20–SD 60 1 Set L.T One Stay Assembly On PMT—Structure/200 (Optional) SDCS–61 1 Set M.V—S.C Two Stay Assembly SDCS–62 32M Stay wire 7/4, 12mm Dia, HDG Steel UTS 101kN Min. SDCS–63 13M Stay wire 7/4, 12mm Dia, HDG Steel UTS 65kN Min. (Optional) SDCS–64 2 Performed Line Post Insulator Top Tie for Quail 20–SD 66 1 Set Pole Numbering Base Plate 20–SD 67 1 Equipment Numbering Base Plate 20–SD 68 1 Set Equipment Numbering Base Plate 20–SD 68 1 Set Equipment Numbering Plates 20–SD 75 8 Terminal Lugs for Cable 4X185mm2 Al. 12–SD	51	6	Strain Clamp 3 U-Bolts type for Merlin	20-SDMS-02	Fig. 29
54 2 Set Phasing Plates (A,B,C). 55 6 Phasing Plates Mounting Brackets. 20–50 56 1 Set Danger Sign Plate Complete With Its Accessories 57 1 Set Danger Sign Mounting Brackets 20–50 58 16M Anti–Climbing Device, Barbed Wire 20–50 59 2 Buckle Type, Locking Clip for Barbed Wire 20–50 60 1 Set L.T One Stay Assembly On PMT –Structure/200 (Optional) 50CS– 61 1 Set M.V–S.C Two Stay Assembly 50CS– 62 32M Stay wire 7/4, 12mm Dia, HDG Steel UTS 101kN Min. 50CS– 63 13M Stay wire 7/3.25, 9.8mm Dia, HDG Steel UTS 65kN Min. (Optional) 50CS– 64 2 Performed Line Post Insulator Top Tie for Quail 65 1 Pole Numbering Base Plate 66 1 Set Pole Numbering Plates 67 1 Equipment Numbering Base Plate 68 1 Set Equipment Numbering Plates 69 8 Terminal Lugs for Cable 4X185mm2 Al.	52	3	Parallel Groove Compression Connector for 170mm2 ACSR/AW (Merlin-Merlin)	20-SDMS-02	Fig. 39
55 6 Phasing Plates Mounting Brackets.  56 1 Set Danger Sign Plate Complete With Its Accessories  57 1 Set Danger Sign Mounting Brackets  58 16M Anti-Climbing Device, Barbed Wire  59 2 Buckle Type, Locking Clip for Barbed Wire  60 1 Set L.T One Stay Assembly On PMT -Structure/200 (Optional)  50cs-61 1 Set M.V-S.C Two Stay Assembly  50cs-62 32M Stay wire 7/4, 12mm Dia, HDG Steel UTS 101kN Min.  50cs-63 13M Stay wire 7/3.25, 9.8mm Dia, HDG Steel UTS 65kN Min. (Optional)  50cs-64 2 Performed Line Post Insulator Top Tie for Quail  65 1 Pole Numbering Base Plate  66 1 Set Pole Numbering Plates  67 1 Equipment Numbering Base Plate  68 1 Set Equipment Numbering Plates  69 8 Terminal Lugs for Cable 4X185mm2 Al.	53	1	Parallel Groove Compression Connector for 67.44mm2 ACSR/AW (Quail-Quail)	20-SDMS-02	Fig. 39
56 1 Set Danger Sign Plate Complete With Its Accessories  57 1 Set Danger Sign Mounting Brackets  58 16M Anti-Climbing Device, Barbed Wire  59 2 Buckle Type, Locking Clip for Barbed Wire  60 1 Set L.T One Stay Assembly On PMT -Structure/200 (Optional)  50 50 50 50 50 50 50 50 50 50 50 50 50 5	54	2 Set	Phasing Plates (A,B,C).	20-SDMS-02	Fig. 53
57 1 Set Danger Sign Mounting Brackets  58 16M Anti-Climbing Device, Barbed Wire  59 2 Buckle Type, Locking Clip for Barbed Wire  50-50  60 1 Set L.T One Stay Assembly On PMT -Structure/200 (Optional)  50CS-  61 1 Set M.V-S.C Two Stay Assembly  50CS-  62 32M Stay wire 7/4, 12mm Dia, HDG Steel UTS 101kN Min.  50CS-  63 13M Stay wire 7/3.25, 9.8mm Dia, HDG Steel UTS 65kN Min. (Optional)  50CS-  61 1 Set Pole Numbering Base Plate  62 20-SD  63 1 Set Pole Numbering Plates  64 2 Performed Line Post Insulator Top Tie for Quail  65 1 Pole Numbering Base Plate  66 1 Set Pole Numbering Plates  67 1 Equipment Numbering Base Plate  68 1 Set Equipment Numbering Plates  69 8 Terminal Lugs for Cable 4X185mm2 Al.	55	6	Phasing Plates Mounting Brackets.	20-SDMS-02	Fig. 54
58 16M Anti-Climbing Device, Barbed Wire  59 2 Buckle Type, Locking Clip for Barbed Wire  60 1 Set L.T One Stay Assembly On PMT -Structure/200 (Optional)  50 50 50 50 50 50 50 50 50 50 50 50 50 5	56	1 Set	Danger Sign Plate Complete With Its Accessories	20-SDMS-02	Fig. 49
59 2 Buckle Type, Locking Clip for Barbed Wire 20–SD 60 1 Set L.T One Stay Assembly On PMT –Structure/200 (Optional) SDCS– 61 1 Set M.V–S.C Two Stay Assembly SDCS– 62 32M Stay wire 7/4, 12mm Dia, HDG Steel UTS 101kN Min. SDCS– 63 13M Stay wire 7/3.25, 9.8mm Dia, HDG Steel UTS 65kN Min. (Optional) SDCS– 64 2 Performed Line Post Insulator Top Tie for Quail 20–SD 65 1 Pole Numbering Base Plate 20–SD 66 1 Set Pole Numbering Plates 20–SD 67 1 Equipment Numbering Base Plate 20–SD 68 1 Set Equipment Numbering Plates 20–SD 69 8 Terminal Lugs for Cable 4X185mm2 Al. 12–SD	57	1 Set	Danger Sign Mounting Brackets	20-SDMS-02	Fig. 50
60 1 Set L.T One Stay Assembly On PMT -Structure/200 (Optional)  61 1 Set M.V-S.C Two Stay Assembly  62 32M Stay wire 7/4, 12mm Dia, HDG Steel UTS 101kN Min.  63 13M Stay wire 7/3.25, 9.8mm Dia, HDG Steel UTS 65kN Min. (Optional)  64 2 Performed Line Post Insulator Top Tie for Quail  65 1 Pole Numbering Base Plate  66 1 Set Pole Numbering Plates  67 1 Equipment Numbering Base Plate  68 1 Set Equipment Numbering Plates  69 8 Terminal Lugs for Cable 4X185mm2 Al.	58	16M	Anti-Climbing Device, Barbed Wire	20-SDMS-02	Fig. 13
61 1 Set M.V-S.C Two Stay Assembly 62 32M Stay wire 7/4, 12mm Dia, HDG Steel UTS 101kN Min. 63 13M Stay wire 7/3.25, 9.8mm Dia, HDG Steel UTS 65kN Min. (Optional) 64 2 Performed Line Post Insulator Top Tie for Quail 65 1 Pole Numbering Base Plate 66 1 Set Pole Numbering Plates 67 1 Equipment Numbering Base Plate 68 1 Set Equipment Numbering Plates 69 8 Terminal Lugs for Cable 4X185mm2 Al.	59	2	Buckle Type, Locking Clip for Barbed Wire	20-SDMS-02	Fig. 13
62 32M Stay wire 7/4, 12mm Dia, HDG Steel UTS 101kN Min. 63 13M Stay wire 7/3.25, 9.8mm Dia, HDG Steel UTS 65kN Min. (Optional) 64 2 Performed Line Post Insulator Top Tie for Quail 65 1 Pole Numbering Base Plate 66 1 Set Pole Numbering Plates 67 1 Equipment Numbering Base Plate 68 1 Set Equipment Numbering Plates 69 8 Terminal Lugs for Cable 4X185mm2 Al. 12-SD	60	1 Set	L.T One Stay Assembly On PMT -Structure/200 (Optional)	SDCS-01	Drw. 321
63 13M Stay wire 7/3.25, 9.8mm Dia, HDG Steel UTS 65kN Min. (Optional)  64 2 Performed Line Post Insulator Top Tie for Quail  65 1 Pole Numbering Base Plate  66 1 Set Pole Numbering Plates  67 1 Equipment Numbering Base Plate  68 1 Set Equipment Numbering Plates  69 8 Terminal Lugs for Cable 4X185mm2 Al.	61	1 Set	M.V-S.C Two Stay Assembly	SDCS-01	Drw. 313
64 2 Performed Line Post Insulator Top Tie for Quail 20-SD 65 1 Pole Numbering Base Plate 20-SD 66 1 Set Pole Numbering Plates 20-SD 67 1 Equipment Numbering Base Plate 20-SD 68 1 Set Equipment Numbering Plates 20-SD 69 8 Terminal Lugs for Cable 4X185mm2 Al. 12-SD	62	32M	Stay wire 7/4, 12mm Dia, HDG Steel UTS 101kN Min.	SDCS-01	
65 1 Pole Numbering Base Plate 20-SD 66 1 Set Pole Numbering Plates 20-SD 67 1 Equipment Numbering Base Plate 20-SD 68 1 Set Equipment Numbering Plates 20-SD 69 8 Terminal Lugs for Cable 4X185mm2 Al. 12-SD	63	13M	Stay wire 7/3.25, 9.8mm Dia, HDG Steel UTS 65kN Min. (Optional)	SDCS-01	
66       1 Set       Pole Numbering Plates       20-SD         67       1       Equipment Numbering Base Plate       20-SD         68       1 Set       Equipment Numbering Plates       20-SD         69       8       Terminal Lugs for Cable 4X185mm2 Al.       12-SD	64	2	Performed Line Post Insulator Top Tie for Quail	20-SDMS-02	Fig. 35
67 1 Equipment Numbering Base Plate 20-SD 68 1 Set Equipment Numbering Plates 20-SD 69 8 Terminal Lugs for Cable 4X185mm2 Al. 12-SD	65	1	Pole Numbering Base Plate	20-SDMS-02	Fig. 51
68 1 Set Equipment Numbering Plates 20-SD 69 8 Terminal Lugs for Cable 4X185mm2 Al. 12-SD	66	1 Set	Pole Numbering Plates	20-SDMS-02	Fig. 51
69 8 Terminal Lugs for Cable 4X185mm2 Al. 12-SD	67	1	Equipment Numbering Base Plate	20-SDMS-02	Fig. 52
	68	1 Set	Equipment Numbering Plates	20-SDMS-02	Fig. 52
70 6 Terminal Lugs for Quadruplex Cable 4X120mm2 Al.	69	8	Terminal Lugs for Cable 4X185mm2 Al.	12-SDMS-02	Fig. 4
<del> </del>	70	6	Terminal Lugs for Quadruplex Cable 4X120mm2 Al.	12-SDMS-02	Fig. 4

DRW.186A2/2-SINGLE POLE MOUNTED TRANSFORMER 50kVA ON 13M M.V MEDIUM & HEAVY ANGLE STRUCTURE (16°-90°) WITH PMT CABINET



# الشركة السعودية للكهرباء

## SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFEREN	ICES
01	1	OC13S-13 Meter Steel Pole, HDG, Single Circuit	20-SDMS-01	Page 35
02	2	Crossarm-L 100x100x12x2400mm L.G.	20-SDMS-02	Fig. 1
03	1	Fuse Cut—Out Mounting Channel—Single Pole 125x65x65x6x2400mm L.G.	20-SDMS-02	Fig.
04	2	Brace-L 50x50x4x828mm L.G.	20-SDMS-02	Fig. 4
05	2	Brace-L 50x50x4x828mm L.G. With One End Clipped	20-SDMS-02	Fig. 4
06	2	Brace-L 50x50x4x828mm L.G. With Both End Clipped	20-SDMS-02	Fig.
07	4	Line Post Insulator	15-SDMS-01	Clause 4.2.8
80	2 Set	Performed Line Post Insulator Top Tie for Merlin ACSR	20-SDMS-02	Fig. 35
09	2	Strain Clamp straight line deadend type for Quadruplex	20-SDMS-02	Fig. 30
10	2	Strain Clamp straight line deadend type for Quail ACSR	20-SDMS-02	Fig. 30
11	12	Machine Bolt, M20x60mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
12	3	Machine Bolt, M20x225mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
13	2	Machine Bolt, M20x265mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
14	2	Machine Bolt, M20x325mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
15	2	Machine Bolt, M20x380mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
16	1	Machine Bolt, M16x275mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
17	3	Parallel Groove Compression Connector for Merlin — Quail	20-SDMS-02	Fig. 39
18	1	Transformer, 100KVA	51-SDMS-01	
19	3	Fuse Cut—Out (Complete Assembly)	34-SDMS-01	
20	3	Terminal Plug For 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 42
21	9	Terminal Lug for 35mm2 Cu.	20-SDMS-02	Fig. 46
22	3	Surge Arrester	35-SDMS-01	
23	15M	70mm2 Copper. Bare Conductor		
24	18M	Quail Conductor, 67.44mm2 ACSR/AW	10-SDMS-01	
25	9М	Copper Conductor, Insulated Stranded 35mm2 Soft Drawn		
26	3	35mm2 Cu. Flexible Cored Wire with Lugs	20-SDMS-02	
27	2	Crimpit Cu. Connector for 70mm2	20-SDMS-02	Fig. 45
28	1	Ground Wire Guard	20-SDMS-02	Fig. 47
29	1	P.M.T. Cabinet 400A	31-SDMS-03	
30	4M	Cable Al. — 4x185mm2 Main Incoming	11-SDMS-01	
31	2	Cable Tie	20-SDMS-02	Fig. 63
32	6	Insulated Type Sleeve for Connecting Quadruplex/120mm2—120mm2	20-SDMS-02	Fig. 34
33	10M	Stainless Steel Strap Band	20-SDMS-02	Fig. 55
34	10	Buckle for Stainless Steel Strap Band	20-SDMS-02	Fig. 55
35	3М	Rigid PVC Sleeve for Stainless Steel Strap	20-SDMS-02	Fig. 55

DRW.186B1/2-SINGLE POLE MOUNTED TRANSFORMER 100kVA ON 13M M.V MEDIUM & HEAVY ANGLE STRUCTURE (16°-90°) WITH PMT CABINET



# الشركة السعودية للكهرباء

## SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFEREN	ICES
36	11	Terminal Lug for 70mm2 Cu. Cable	12-SDMS-02	
37	18M	Copper Conductor Insulated Stranded 70mm2 Soft Drawn		
38	18м	Quadruplex Cable 120mm2	11-SDMS-02	
39	2	Polyethelene Rigid Pipe, 3 Mtrs. 70mm O.D. 3mm Thickness	20-SDMS-02	
40	2	Weather Head, Al. for 70mm O.D. PVC 3mm Thickness	20-SDMS-02	
41	2	Flexible Pipe, 1Mtr. for 70mm O.D. PVC Rigid Pipe for Outgoing Cable	20-SDMS-02	
42	1	Flexible Pipe, 4 Mtrs, 75mm ID. for 4x185mm2 Incoming Cable	20-SDMS-02	
43	2	Earth Wire Suspension Support	20-SDMS-02	Fig. 05
44	10	Anchor Shackle	20-SDMS-02	Fig. 20
45	1	Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu70mm2 Al.	20-SDMS-02	
46	2	Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu120mm2 Al.	20-SDMS-02	
47	2	Suspension Insulator (Single)	15-SDMS-01	Clause 4.2.5
48	6 Set	Suspension Insulator	15-SDMS-01	Clause 4.2.5
49	8	Clevis Eye Extension	20-SDMS-02	Fig. 21
50	3	Double Arming Plate	20-SDMS-02	Fig. 07
51	6	Strain Clamp 3 U—Bolts type for Merlin	20-SDMS-02	Fig. 29
52	3	Parallel Groove Compression Connector for 170mm2 ACSR/AW (Merlin—Merlin)	20-SDMS-02	Fig. 39
53	1	Parallel Groove Compression Connector for 67.44mm2 ACSR/AW (Quail—Quail)	20-SDMS-02	Fig. 39
54	2 Set	Phasing Plates (A,B,C).	20-SDMS-02	Fig. 53
55	6	Phasing Plates Mounting Brackets.	20-SDMS-02	Fig. 54
56	1 Set	Danger Sign Plate Complete With Its Accessories	20-SDMS-02	Fig. 49
57	1 Set	Danger Sign Mounting Brackets	20-SDMS-02	Fig. 50
58	16M	Anti-Climbing Device, Barbed Wire	20-SDMS-02	Fig. 13
59	2	Buckle Type, Locking Clip for Barbed Wire	20-SDMS-02	Fig. 13
60	1 Set	L.T One Stay Assembly On PMT —Structure/200 (Optional)	SDCS-01	Drw. 321
61	1 Set	M.V—S.C Two Stay Assembly	SDCS-01	Drw. 313
62	32M	Stay wire 7/4, 12mm Dia, HDG Steel UTS 101kN Min.	SDCS-01	
63	13M	Stay wire 7/3.25, 9.8mm Dia, HDG Steel UTS 65kN Min. (Optional)	SDCS-01	
64	2	Performed Line Post Insulator Top Tie for Quail	20-SDMS-02	Fig. 35
65	1	Pole Numbering Base Plate	20-SDMS-02	Fig. 51
66	1 Set	Pole Numbering Plates	20-SDMS-02	Fig. 51
67	1	Equipment Numbering Base Plate	20-SDMS-02	Fig. 52
68	1 Set	Equipment Numbering Plates	20-SDMS-02	Fig. 52
69	8	Terminal Lugs for Cable 4X185mm2 Al.	12-SDMS-02	Fig. 4
70	6	Terminal Lugs for Quadruplex Cable 4X120mm2 Al.	12-SDMS-02	Fig. 4

DRW.186B2/2-SINGLE POLE MOUNTED TRANSFORMER 100kVA ON 13M M.V MEDIUM & HEAVY ANGLE STRUCTURE (16°-90°) WITH PMT CABINET

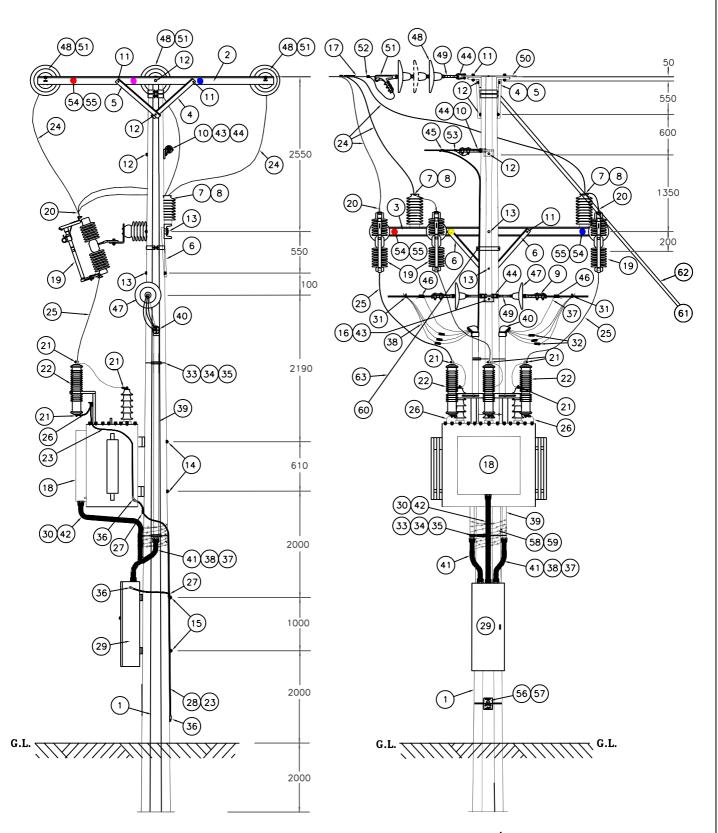


# الشركة السعودية للكهرباء

SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G



DRW.187-SINGLE POLE MOUNTED TRANSFORMER 50/100kVA ON 13M M.V TERMINAL STRUCTURE WITH STAYS & PMT CABINET

ALL DIMENSIONS ARE IN MILLIMETER



# الشركة السعودية للكهرباء

## SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFEREN	NCES
01	1	OC13S-13 Meter Steel Pole, HDG, Single Circuit	20-SDMS-01	Page 35
02	2	Crossarm-L 100x100x12x2400mm L.G.	20-SDMS-02	Fig. 1
03	1	Fuse Cut—Out Mounting Channel—Single Pole 125x65x65x6x2400mm L.G.	20-SDMS-02	Fig.
04	2	Brace-L 50x50x4x828mm L.G.	20-SDMS-02	Fig. 4
05	2	Brace-L 50x50x4x828mm L.G. With One End Clipped	20-SDMS-02	Fig. 4
06	2	Brace-L 50x50x4x828mm L.G. With Both End Clipped	20-SDMS-02	Fig.
07	2	Line Post Insulator	15-SDMS-01	Clause 4.2.8
80	2 Set	Performed Line Post Insulator Top Tie for Quail.	20-SDMS-02	Fig. 35
09	2	Strain Clamp straight line deadend type for Quadruplex	20-SDMS-02	Fig. 30
10	1	Strain Clamp straight line deadend type for Quail ACSR	20-SDMS-02	Fig. 30
11	12	Machine Bolt, M20x60mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
12	3	Machine Bolt, M20x225mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
13	2	Machine Bolt, M20x265mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
14	2	Machine Bolt, M20x325mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
15	2	Machine Bolt, M20x380mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
16	1	Machine Bolt, M16x275mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
17	3	Parallel Groove Compression Connector for Merlin — Quail	20-SDMS-02	Fig. 39
18	1	Transformer, 50KVA	51-SDMS-01	
19	3	Fuse Cut-Out (Complete Assembly)	34-SDMS-01	
20	3	Terminal Plug For 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 42
21	9	Terminal Lug for 35mm2 Cu.	20-SDMS-02	Fig. 46
22	3	Surge Arrester	35-SDMS-01	
23	15M	70mm2 Copper. Bare Conductor		
24	18M	Quail Conductor, 67.44mm2 ACSR/AW	10-SDMS-01	
25	9М	Copper Conductor, Insulated Stranded 35mm2 Soft Drawn		
26	3	35mm2 Cu. Flexible Cored Wire with Lugs	20-SDMS-02	
27	2	Crimpit Cu. Connector for 70mm2	20-SDMS-02	Fig. 45
28	1	Ground Wire Guard	20-SDMS-02	Fig. 47
29	1	P.M.T. Cabinet 400A	31-SDMS-03	
30	4M	Cable Al. — 4x185mm2 Main Incoming	11-SDMS-01	
31	2	Cable Tie	20-SDMS-02	Fig. 63
32	6	Insulated Type Sleeve for Connecting Quadruplex/120mm2—120mm2	20-SDMS-02	Fig. 34
33	10M	Stainless Steel Strap Band	20-SDMS-02	Fig. 55
34	10	Buckle for Stainless Steel Strap Band	20-SDMS-02	Fig. 55
35	3М	Rigid PVC Sleeve for Stainless Steel Strap	20-SDMS-02	Fig. 55

DRW.187A1/2-SINGLE POLE MOUNTED TRANSFORMER 50kVA ON 13M M.V TERMINAL STRUCTURE WITH STAYS & PMT CABINET



# الشركة السعودية للكهرباء

## SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL QTY BILL OF MATERIALS DESCRIPTION REFEREN			NCES	
36	11	Terminal Lug for 70mm2 Cu. Cable	12-SDMS-02	
37	18M	Copper Conductor Insulated Stranded 70mm2 Soft Drawn		
38	18M	Quadruplex Cable 120mm2	11-SDMS-02	
39	2	Polyethelene Rigid Pipe, 3 Mtrs. 70mm O.D. 3mm Thickness	20-SDMS-02	
40	2	Weather Head, Al. for 70mm O.D. PVC 3mm Thickness	20-SDMS-02	
41	2	Flexible Pipe, 1Mtr. for 70mm O.D. PVC Rigid Pipe for Outgoing Cable	20-SDMS-02	
42	1	Flexible Pipe, 4 Mtrs, 75mm ID. for 4x185mm2 Incoming Cable	20-SDMS-02	
43	2	Earth Wire Suspension Support	20-SDMS-02	Fig. 05
44	6	Anchor Shackle	20-SDMS-02	Fig. 20
45	1	Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu70mm2 Al.	20-SDMS-02	
46	2	Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu120mm2 Al.	20-SDMS-02	
47	2	Suspension Insulator (Single)	15-SDMS-01	Clause 4.2.5
48	3 Set	Suspension Insulator	15-SDMS-01	Clause 4.2.5
49	5	Clevis Eye Extension	20-SDMS-02	Fig. 21
50	3	Double Arming Plate	20-SDMS-02	Fig. 07
51	3	Strain Clamp 3 U-Bolts type for Merlin	20-SDMS-02	Fig. 29
52	3	Parallel Groove clamp 3 Bolts type for Merlin ACSR/AW 170mm2	20-SDMS-02	Fig. 39
53	1	Parallel Groove clamp 2 bolts type for Quail ACSR/AW 67.44mm2	20-SDMS-02	Fig. 39
54	2 Set	Phasing Plates (A,B,C).	20-SDMS-02	Fig. 53
55	6	Phasing Plates Mounting Brackets.	20-SDMS-02	Fig. 54
56	1 Set	Danger Sign Plate Complete With Its Accessories	20-SDMS-02	Fig. 49
57	1 Set	Danger Sign Mounting Brackets	20-SDMS-02	Fig. 50
58	16M	Anti-Climbing Device, Barbed Wire	20-SDMS-02	Fig. 13
59	2	Buckle Type, Locking Clip for Barbed Wire	20-SDMS-02	Fig. 13
60	1 Set	L.T One Stay Assembly On PMT -Structure/200 (Optional)	SDCS-01	Drw. 321
61	1 Set	M.V-S.C Two Stay Assembly	SDCS-01	Drw. 313
62	32M	Stay wire 7/4, 12mm Dia, HDG Steel UTS 101kN Min.	SDCS-01	
63	13M	Stay wire 7/3.25, 9.8mm Dia, HDG Steel UTS 65kN Min. (Optional)	SDCS-01	
64	1	Pole Numbering Base Plate	20-SDMS-02	Fig. 51
65	1 Set	Pole Numbering Plates	20-SDMS-02	Fig. 51
66	1	Equipment Numbering Base Plate	20-SDMS-02	Fig. 52
67	1 Set	Equipment Numbering Plates	20-SDMS-02	Fig. 52
68	8	Terminal Lugs for Cable 4X185mm2 Al.	12-SDMS-02	Fig. 4
69	6	Terminal Lugs for Quadruplex Cable 4X120mm2 Al.	12-SDMS-02	Fig. 4

DRW.187A2/2-SINGLE POLE MOUNTED TRANSFORMER 50kVA ON 13M M.V TERMINAL STRUCTURE WITH STAYS & PMT CABINET



# الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFEREN	NCES
01	1	OC13S-13 Meter Steel Pole, HDG, Single Circuit	20-SDMS-01	Page 34
02	2	Crossarm-L 100x100x12x2400mm L.G.	20-SDMS-02	Fig. 1
03	1	Fuse Cut-Out Mounting Channel-Single Pole 125x65x65x6x2400mm L.G.	20-SDMS-02	Fig.
04	2	Brace-L 50x50x4x828mm L.G.	20-SDMS-02	Fig. 4
05	2	Brace-L 50x50x4x828mm L.G. With One End Clipped	20-SDMS-02	Fig. 4
06	2	Brace-L 50x50x4x828mm L.G. With Both End Clipped	20-SDMS-02	Fig.
07	2	Line Post Insulator	15-SDMS-01	Clause 4.2.8
80	2 Set	Performed Line Post Insulator Top Tie for Quail.	20-SDMS-02	Fig. 35
09	2	Strain Clamp straight line deadend type for Quadruplex	20-SDMS-02	Fig. 30
10	1	Strain Clamp straight line deadend type for Quail ACSR	20-SDMS-02	Fig. 30
11	12	Machine Bolt, M20x60mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
12	3	Machine Bolt, M20x225mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
13	2	Machine Bolt, M20x265mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
14	2	Machine Bolt, M20x325mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
15	2	Machine Bolt, M20x380mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
16	1	Machine Bolt, M16x275mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
17	3	Parallel Groove Compression Connector for Merlin — Quail	20-SDMS-02	Fig. 39
18	1	Transformer, 100KVA	51-SDMS-01	
19	3	Fuse Cut-Out (Complete Assembly)	34-SDMS-01	
20	3	Terminal Plug For 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 42
21	9	Terminal Lug for 35mm2 Cu.	20-SDMS-02	Fig. 46
22	3	Surge Arrester	35-SDMS-01	
23	15M	70mm2 Copper. Bare Conductor		
24	18M	Quail Conductor, 67.44mm2 ACSR/AW	10-SDMS-01	
25	9М	Copper Conductor, Insulated Stranded 35mm2 Soft Drawn		
26	3	35mm2 Cu. Flexible Cored Wire with Lugs	20-SDMS-02	
27	2	Crimpit Cu. Connector for 70mm2	20-SDMS-02	Fig. 45
28	1	Ground Wire Guard	20-SDMS-02	Fig. 47
29	1	P.M.T. Cabinet 400A	31-SDMS-03	
30	4M	Cable Al. — 4x185mm2 Main Incoming	11-SDMS-01	
31	2	Cable Tie	20-SDMS-02	Fig. 63
32	6	Insulated Type Sleeve for Connecting Quadruplex/120mm2—120mm2	20-SDMS-02	Fig. 34
33	10M	Stainless Steel Strap Band	20-SDMS-02	Fig. 55
34	10	Buckle for Stainless Steel Strap Band	20-SDMS-02	Fig. 55
35	3м	Rigid PVC Sleeve for Stainless Steel Strap	20-SDMS-02	Fig. 55

DRW.187B1/2-SINGLE POLE MOUNTED TRANSFORMER 100kVA ON 13M M.V TERMINAL STRUCTURE WITH STAYS & PMT CABINET



# الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

36 37 38	11 18M	BILL OF MATERIALS DESCRIPTION  Terminal Lug for 70mm2 Cu. Cable	REFEREN	
37		Terrimor Lag for 70mm2 od. Cable	12-SDMS-02	1
<u> </u>	1011	Copper Conductor Insulated Stranded 70mm2 Soft Drawn	12 35 113 32	
L 33 L	18M	Quadruplex Cable 120mm2	11-SDMS-02	
l 39 l	2	Polyethelene Rigid Pipe, 3 Mtrs. 70mm O.D. 3mm Thickness	20-SDMS-02	
40	2	Weather Head, Al. for 70mm O.D. PVC 3mm Thickness	20-SDMS-02	
41	2	Flexible Pipe, 1Mtr. for 70mm O.D. PVC Rigid Pipe for Outgoing Cable	20-SDMS-02	
42	1	Flexible Pipe, 4 Mtrs, 75mm ID. for 4x185mm2 Incoming Cable	20-SDMS-02	
43	2	Earth Wire Suspension Support	20-SDMS-02	Fig. 05
44	6	Anchor Shackle	20-SDMS-02	-
45	1	Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu70mm2 Al.	20-SDMS-02	1 19. 20
46	2	Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu120mm2 Al.	20-SDMS-02	
47	2	Suspension Insulator (Single)	15-SDMS-01	Clause 4.2.5
-	3 Set	Suspension Insulator	15-SDMS-01	Clause
49	5	Clevis Eye Extension	20-SDMS-02	4.2.5 Fig. 21
50	3	Double Arming Plate	20-SDMS-02	_
51	3	Strain Clamp 3 U-Bolts type for Merlin	20-SDMS-02	
52	3	Parallel Groove clamp 3 Bolts type for Merlin ACSR/AW 170mm2	20-SDMS-02	<u> </u>
53	1	Parallel Groove clamp 2 bolts type for Quail ACSR/AW 67.44mm2	20-SDMS-02	Fig. 39
<u> </u>	2 Set	Phasing Plates (A,B,C).	20-SDMS-02	Fig. 53
55	6	Phasing Plates Mounting Brackets.	20-SDMS-02	Fig. 54
56	1 Set	Danger Sign Plate Complete With Its Accessories	20-SDMS-02	
57	1 Set	Danger Sign Mounting Brackets	20-SDMS-02	Fig. 50
58	16M	Anti-Climbing Device, Barbed Wire	20-SDMS-02	Fig. 13
59	2	Buckle Type, Locking Clip for Barbed Wire	20-SDMS-02	Fig. 13
60	1 Set	L.T One Stay Assembly On PMT -Structure/200 (Optional)	SDCS-01	Drw. 321
61		M.V-S.C Two Stay Assembly	SDCS-01	Drw. 313
62	32M	Stay wire 7/4, 12mm Dia, HDG Steel UTS 101kN Min.	SDCS-01	
63	13M	Stay wire 7/3.25, 9.8mm Dia, HDG Steel UTS 65kN Min. (Optional)	SDCS-01	
64	1	Pole Numbering Base Plate	20-SDMS-02	Fig. 51
65	1 Set	Pole Numbering Plates	20-SDMS-02	Fig. 51
66	1	Equipment Numbering Base Plate	20-SDMS-02	Fig. 52
67 ·	1 Set	Equipment Numbering Plates	20-SDMS-02	Fig. 52
68	8	Terminal Lugs for Cable 4X185mm2 Al.	12-SDMS-02	Fig. 4
69	6	Terminal Lugs for Quadruplex Cable 4X120mm2 Al.	12-SDMS-02	Fig. 4

DRW.187B2/2-SINGLE POLE MOUNTED TRANSFORMER 100kVA ON 13M M.V TERMINAL STRUCTURE WITH STAYS & PMT CABINET

# Saudi Electricity Company الشركة السعودية للكهرباء SDCS-01 SEC DISTRIBUTION CONSTRUCTION STANDARDS DATE: DECEMBER 2005G 50/100kVA PMT ON 14M POLE SINGLE POLE TRANSFORMER STRUCTURE

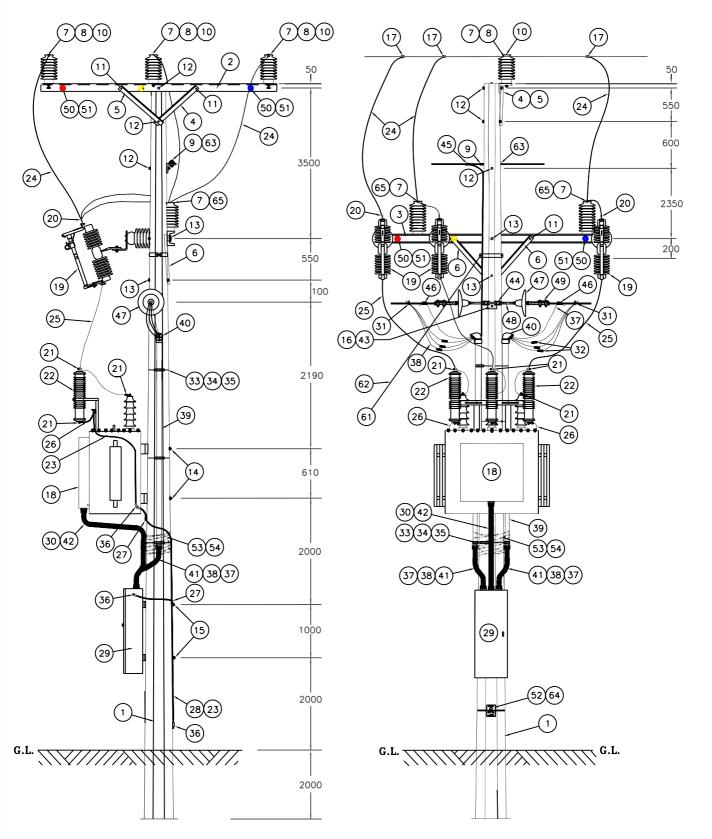


# الشركة السعودية للكهرباء

SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G



DRW.188-SINGLE POLE MOUNTED TRANSFORMER 50/100kVA ON 14M M.V INTERMEDIATE STRUCTURE (0°-5°) WITH PMT CABINET

ALL DIMENSIONS ARE IN MILLIMETER



# الشركة السعودية للكهرباء

## SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFEREN	ICES
01	1	OC14S-14 Meter Steel Pole, HDG, Single Circuit	20-SDMS-01	Page 36
02	1	Crossarm-L 100x100x12x2400mm L.G.	20-SDMS-02	Fig. 1
03	1	Fuse Cut—Out Mounting Channel—Single Pole 125x65x65x6x2400mm L.G.	20-SDMS-02	Fig.
04	1	Brace-L 50x50x4x828mm L.G.	20-SDMS-02	Fig. 4
05	1	Brace-L 50x50x4x828mm L.G. With One End Clipped	20-SDMS-02	Fig. 4
06	2	Brace-L 50x50x4x828mm L.G. With Both End Clipped	20-SDMS-02	Fig.
07	5	Line Post Insulator	15-SDMS-01	Clause 4.2.8
08	3 Set	Preformed Armour Rods For 170.5mm2 ACSR/AW (Merlin)	20-SDMS-02	Fig. 38
09	1 Set	Preformed Armour Rod for 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 38
10	3 Set	Preformed Line Post Insulator Top Tie for Merlin With Armour	20-SDMS-02	Fig. 35
11	4	Machine Bolt, M20x60mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
12	3	Machine Bolt, M20x225mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
13	2	Machine Bolt, M20x285mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
14	2	Machine Bolt, M20x365mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
15	2	Machine Bolt, M20x400mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
16	1	Machine Bolt, M16x310mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
17	3	Parallel Groove Compression Connector for Merlin — Quail	20-SDMS-02	Fig. 39
18	1	Transformer, 50KVA	51-SDMS-01	
19	3	Fuse Cut-Out (Complete Assembly)	34-SDMS-01	
20	3	Terminal Plug For 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 42
21	9	Terminal Lug for 35mm2 Cu.	12-SDMS-02	Fig. 1
22	3	Surge Arrester	35-SDMS-01	
23	15M	70mm2 Cu. Bare Conductor		
24	21M	Quail Conductor, 67.44mm2 ACSR/AW	10-SDMS-01	
25	9М	Cu. Conductor, Insulated Stranded 35mm2 Soft Drawn		
26	3	35mm2 Cu. Flexible Cored Wire with Lugs	20-SDMS-02	
27	2	Crimpit Cu. Connector for 70mm2	20-SDMS-02	Fig. 45
28	1	Ground Wire Guard	20-SDMS-02	Fig. 47
29	1	P.M.T. Cabinet 400A	31-SDMS-03	
30	4M	Cable Al. — 4x185mm2 Main Incoming	11-SDMS-01	
31	2	Cable Tie	20-SDMS-02	Fig. 63
32	6	Insulated Type Sleeve for Connecting Quadruplex/120mm2—120mm2	20-SDMS-02	Fig. 34
33	10M	Stainless Steel Strap Band	20-SDMS-02	Fig. 55
34	10	Buckle for Stainless Steel Strap Band	20-SDMS-02	Fig. 55
35	3M	Rigid PVC Sleeve for Stainless Steel Strap	20-SDMS-02	Fig. 55

DRW.188A1/2-SINGLE POLE MOUNTED TRANSFORMER 50kVA ON 14M M.V INTERMEDIATE STRUCTURE (0°-5°) WITH PMT CABINET

TRSP1A



# الشركة السعودية للكهرباء

## SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFEREN	ICES
36	11	Terminal Lug 70mm2 Cu. Cable	12-SDMS-02	
37	18M	Cu. Conductor Insulated Stranded 70mm2 Soft Drawn		
38	18M	Quadruplex Cable 120mm2 Al.	11-SDMS-02	
39	2	Polyethelene Rigid Pipe, 3 Mtrs. 70mm O.D. 3mm Thickness	20-SDMS-02	
40	2	Weather Head, Al. for 70mm O.D. PVC 3mm Thickness	20-SDMS-02	
41	2	Flexible Pipe, 1Mtr. 70mm O.D. PVC Rigid Pipe for Outgoing Cable	20-SDMS-02	
42	1	Flexible Pipe, 4 Mtrs. 75mm I.D for 4x185mm2 Incoming Cable	20-SDMS-02	
43	1	Earth Wire Suspension Support	20-SDMS-02	Fig. 05
44	2	Anchore Shackle	20-SDMS-02	Fig. 20
45	1	Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu70mm2 Al.	20-SDMS-02	
46	2	Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu120mm2 Al.	20-SDMS-02	
47	2	Suspension Insulator	15-SDMS-01	Clause 4.2.5
48	2	Clevis Eye Extension	20-SDMS-02	Fig. 21
49	2	Strain Clamp, Straight Line Deadend Type for Quadruplex	20-SDMS-02	Fig. 30
50	2 Set	Phasing Plates (A,B,C).	20-SDMS-02	Fig. 53
51	6	Phasing Plates Mounting Brackets.	20-SDMS-02	Fig. 54
52	1 Set	Danger Sign Plate Complete With Its Accessories	20-SDMS-02	Fig. 49
53	17M	Anti-Climbing Divice, Barbed Wire	20-SDMS-02	Fig. 13
54	2	Buckle Type, Locking Clip for Barbed Wire	20-SDMS-02	Fig. 13
55	1	Pole Numbering Base Plate	20-SDMS-02	Fig. 51
56	1 Set	Pole Numbering Plates	20-SDMS-02	Fig. 51
57	1	Equipment Numbering Base Plate	20-SDMS-02	Fig. 52
58	1 Set	Equipment Numbering Plates	20-SDMS-02	Fig. 52
59	8	Terminal Lugs for Cable 4X185mm2 Al.	12-SDMS-02	Fig. 4
60	6	Terminal Lugs for Quadruplex Cable 4X120mm2 Al.	12-SDMS-02	Fig. 4
61	1 Set	L.T One Stay assembly On PMT-Structure/240 (Optional)	SDCS-01	Drw. 310
62	13M	Stay wire 7/3.25, 9.8mm Dia, HDG steel, UTS 65kN Min. (Optional)	SDCS-01	
63	1	Earthwire Support Plate, L 110x110x10x150mm Lg.	20-SDMS-02	Fig. 6
64	1 Set	Danger Sign Mounting Brackets	20-SDMS-02	Fig. 50
65	2	Performed Line Post Insulator Top Tie for Quail.	20-SDMS-02	Fig. 35

DRW.188A2/2-SINGLE POLE MOUNTED TRANSFORMER 50kVA ON 14M M.V INTERMEDIATE STRUCTURE (0°-5°) WITH PMT CABINET



# الشركة السعودية للكهرباء

## SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFEREN	ICES
01	1	OC14S-14 Meter Steel Pole, HDG, Single Circuit	20-SDMS-01	Page 36
02	1	Crossarm-L 100x100x12x2400mm L.G.	20-SDMS-02	Fig. 1
03	1	Fuse Cut—Out Mounting Channel—Single Pole 125x65x65x6x2400mm L.G.	20-SDMS-02	Fig.
04	1	Brace-L 50x50x4x828mm L.G.	20-SDMS-02	Fig. 4
05	1	Brace-L 50x50x4x828mm L.G. With One End Clipped	20-SDMS-02	Fig. 4
06	2	Brace—L 50x50x4x828mm L.G. With Both End Clipped	20-SDMS-02	Fig.
07	5	Line Post Insulator	15-SDMS-01	Clause 4.2.8
08	3 Set	Preformed Armour Rods For 170.5mm2 ACSR/AW (Merlin)	20-SDMS-02	Fig. 38
09	1 Set	Preformed Armour Rod for 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 38
10	3 Set	Preformed Line Post Insulator Top Tie for Merlin With Armour	20-SDMS-02	Fig. 35
11	4	Machine Bolt, M20x60mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
12	3	Machine Bolt, M20x225mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
13	2	Machine Bolt, M20x285mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
14	2	Machine Bolt, M20x365mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
15	2	Machine Bolt, M20x400mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
16	1	Machine Bolt, M16x310mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
17	3	Parallel Groove Compression Connector for Merlin — Quail	20-SDMS-02	Fig. 39
18	1	Transformer, 100kVA	51-SDMS-01	
19	3	Fuse Cut-Out (Complete Assembly)	34-SDMS-01	
20	3	Terminal Plug For 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 42
21	9	Terminal Lug for 35mm2 Cu.	12-SDMS-02	Fig. 1
22	3	Surge Arrester	35-SDMS-01	
23	15M	70mm2 Cu. Bare Conductor		
24	21M	Quail Conductor, 67.44mm2 ACSR/AW	10-SDMS-01	
25	9М	Cu. Conductor, Insulated Stranded 35mm2 Soft Drawn		
26	3	35mm2 Cu. Flexible Cored Wire with Lugs	20-SDMS-02	
27	2	Crimpit Cu. Connector for 70mm2	20-SDMS-02	Fig. 45
28	1	Ground Wire Guard	20-SDMS-02	Fig. 47
29	1	P.M.T. Cabinet 400A	31-SDMS-03	
30	4M	Cable Al. — 4x185mm2 Main Incoming	11-SDMS-01	
31	2	Cable Tie	20-SDMS-02	Fig. 63
32	6	Insulated Type Sleeve for Connecting Quadruplex/120mm2—120mm2	20-SDMS-02	Fig. 34
33	10M	Stainless Steel Strap Band	20-SDMS-02	Fig. 55
34	10	Buckle for Stainless Steel Strap Band	20-SDMS-02	Fig. 55
35	3M	Rigid PVC Sleeve for Stainless Steel Strap	20-SDMS-02	Fig. 55

DRW.188B1/2-SINGLE POLE MOUNTED TRANSFORMER 100kVA ON 14M M.V INTERMEDIATE STRUCTURE (0°-5°) WITH PMT CABINET

TRSP1A



# الشركة السعودية للكهرباء

## SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFEREN	ICES
36	11	Terminal Lug 70mm2 Cu. Cable	12-SDMS-02	
37	18M	Cu. Conductor Insulated Stranded 70mm2 Soft Drawn		
38	18М	Quadruplex Cable 120mm2 Al.	11-SDMS-02	
39	2	Polyethelene Rigid Pipe, 3 Mtrs. 70mm O.D. 3mm Thickness	20-SDMS-02	
40	2	Weather Head, Al. for 70mm O.D. PVC 3mm Thickness	20-SDMS-02	
41	2	Flexible Pipe, 1Mtr. 70mm O.D. PVC Rigid Pipe for Outgoing Cable	20-SDMS-02	
42	1	Flexible Pipe, 4 Mtrs. 75mm I.D for 4x185mm2 Incoming Cable	20-SDMS-02	
43	1	Earth Wire Suspension Support	20-SDMS-02	Fig. 05
44	2	Anchore Shackle	20-SDMS-02	Fig. 20
45	1	Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu70mm2 Al.	20-SDMS-02	
46	2	Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu120mm2 Al.	20-SDMS-02	
47	2	Suspension Insulator	15-SDMS-01	Clause 4.2.5
48	2	Clevis Eye Extension	20-SDMS-02	Fig. 21
49	2	Strain Clamp, Straight Line Deadend Type for Quadruplex	20-SDMS-02	Fig. 30
50	2 Set	Phasing Plates (A,B,C).	20-SDMS-02	Fig. 53
51	6	Phasing Plates Mounting Brackets.	20-SDMS-02	Fig. 54
52	1 Set	Danger Sign Plate Complete With Its Accessories	20-SDMS-02	Fig. 49
53	17M	Anti-Climbing Divice, Barbed Wire	20-SDMS-02	Fig. 13
54	2	Buckle Type, Locking Clip for Barbed Wire	20-SDMS-02	Fig. 13
55	1	Pole Numbering Base Plate	20-SDMS-02	Fig. 51
56	1 Set	Pole Numbering Plates	20-SDMS-02	Fig. 51
57	1	Equipment Numbering Base Plate	20-SDMS-02	Fig. 52
58	1 Set	Equipment Numbering Plates	20-SDMS-02	Fig. 52
59	8	Terminal Lugs for Cable 4X185mm2 Al.	12-SDMS-02	Fig. 4
60	6	Terminal Lugs for Quadruplex Cable 4X120mm2 Al.	12-SDMS-02	Fig. 4
61	1 Set	L.T One Stay assembly On PMT-Structure/240 (Optional)	SDCS-01	Drw. 310
62	13M	Stay wire 7/3.25, 9.8mm Dia, HDG steel, UTS 65kN Min. (Optional)	SDCS-01	
63	1	Earthwire Support Plate, L 110x110x10x150mm Lg.	20-SDMS-02	Fig. 6
64	1 Set	Danger Sign Mounting Brackets	20-SDMS-02	Fig. 50
65	2	Performed Line Post Insulator Top Tie for Quail.	20-SDMS-02	Fig. 35

DRW.188B2/2-SINGLE POLE MOUNTED TRANSFORMER 100kVA ON 14M M.V INTERMEDIATE STRUCTURE (0°-5°) WITH PMT CABINET

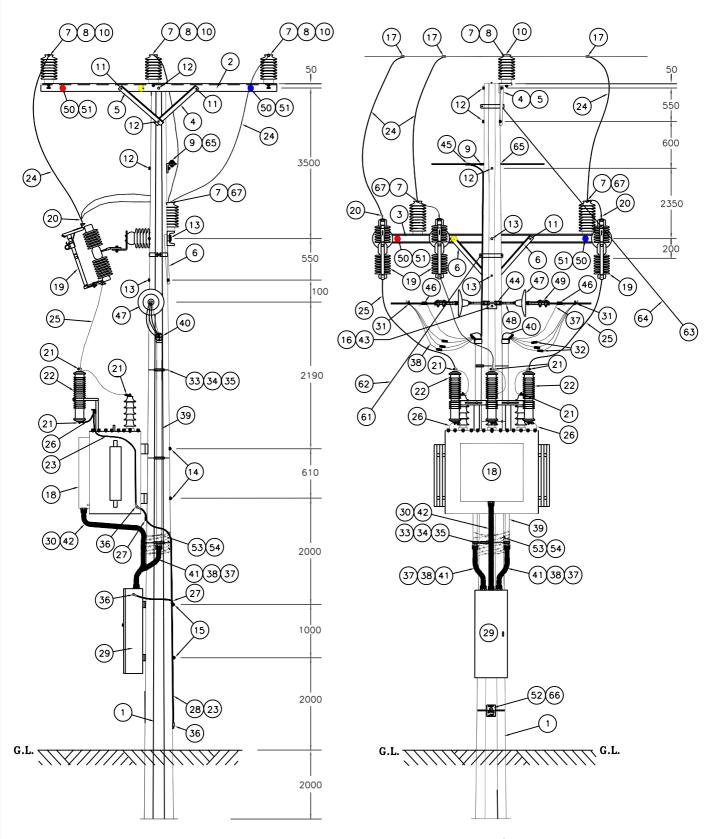


## الشركة السعودية للكهرباء

SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G



DRW.189-SINGLE POLE MOUNTED TRANSFORMER 50/100kVA ON 14M M.V LIGHT ANGLE STRUCTURE (6°-15°) WITH PMT CABINET

ALL DIMENSIONS ARE IN MILLIMETER



# الشركة السعودية للكهرباء

## SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFEREN	1CES
01	1	OC14S-14 Meter Steel Pole, HDG, Single Circuit	20-SDMS-01	Page 36
02	1	Crossarm-L 100x100x12x2400mm L.G.	20-SDMS-02	Fig. 1
03	1	Fuse Cut-Out Mounting Channel-Single Pole 125x65x65x6x2400mm L.G.	20-SDMS-02	Fig.
04	1	Brace-L 50x50x4x828mm L.G.	20-SDMS-02	Fig. 4
05	1	Brace-L 50x50x4x828mm L.G. With One End Clipped	20-SDMS-02	Fig. 4
06	2	Brace-L 50x50x4x828mm L.G. With Both End Clipped	20-SDMS-02	Fig.
07	5	Line Post Insulator	15-SDMS-01	Clause 4.2.8
08	3 Set	Preformed Armour Rods For 170.5mm2 ACSR/AW (Merlin)	20-SDMS-02	Fig. 38
09	1 Set	Preformed Armour Rod for 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 38
10	3 Set	Preformed Line Post Insulator Side Tie for Merlin With Armour	20-SDMS-02	Fig. 35
11	4	Machine Bolt, M20x60mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
12	3	Machine Bolt, M20x225mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
13	2	Machine Bolt, M20x285mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
14	2	Machine Bolt, M20x365mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
15	2	Machine Bolt, M20x400mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
16	1	Machine Bolt, M16x310mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
17	3	Parallel Groove Compression Connector for Merlin — Quail	20-SDMS-02	Fig. 39
18	1	Transformer, 50KVA	51-SDMS-01	
19	3	Fuse Cut-Out (Complete Assembly)	34-SDMS-01	
20	3	Terminal Plug For 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 42
21	9	Terminal Lug for 35mm2 Cu.	12-SDMS-02	Fig. 1
22	3	Surge Arrester	35-SDMS-01	
23	15M	70mm2 Cu. Bare Conductor		
24	21M	Quail Conductor, 67.44mm2 ACSR/AW	10-SDMS-01	
25	9М	Cu. Conductor, Insulated Stranded 35mm2 Soft Drawn		
26	3	35mm2 Cu. Flexible Cored Wire with Lugs	20-SDMS-02	
27	2	Crimpit Cu. Connector for 70mm2	20-SDMS-02	Fig. 45
28	1	Ground Wire Guard	20-SDMS-02	Fig. 47
29	1	P.M.T. Cabinet 400A	31-SDMS-03	
30	4M	Cable Al. — 4x185mm2 Main Incoming	11-SDMS-01	
31	2	Cable Tie	20-SDMS-02	Fig. 63
32	6	Insulated Type Sleeve for Connecting Quadruplex/120mm2—120mm2	20-SDMS-02	Fig. 34
33	10M	Stainless Steel Strap Band	20-SDMS-02	Fig. 55
34	10	Buckle for Stainless Steel Strap Band	20-SDMS-02	Fig. 55
35	3M	Rigid PVC Sleeve for Stainless Steel Strap	20-SDMS-02	Fig. 55

DRW.189A1/2-SINGLE POLE MOUNTED TRANSFORMER 50kVA ON 14M M.V LIGHT ANGLE STRUCTURE (6°-15°) WITH PMT CABINET

TRSP1A



# الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFEREN	ICES
36	11	Terminal Lug 70mm2 Cu. Cable	12-SDMS-02	
37	18M	Cu. Conductor Insulated Stranded 70mm2 Soft Drawn		
38	18M	Quadruplex Cable 120mm2 Al.	11-SDMS-02	
39	2	Polyethelene Rigid Pipe, 3 Mtrs. 70mm O.D. 3mm Thickness	20-SDMS-02	
40	2	Weather Head, Al. for 70mm O.D. PVC 3mm Thickness	20-SDMS-02	
41	2	Flexible Pipe, 1Mtr. 70mm O.D. PVC Rigid Pipe for Outgoing Cable	20-SDMS-02	
42	1	Flexible Pipe, 4 Mtrs. 75mm I.D for 4x185mm2 Incoming Cable	20-SDMS-02	
43	1	Earth Wire Suspension Support	20-SDMS-02	Fig. 05
44	2	Anchore Shackle	20-SDMS-02	Fig. 20
45	1	Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu70mm2 Al.	20-SDMS-02	
46	2	Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu120mm2 Al.	20-SDMS-02	
47	2	Suspension Insulator	15-SDMS-01	Clause 4.2.5
48	2	Clevis Eye Extension	20-SDMS-02	Fig. 21
49	2	Strain Clamp, Straight Line Deadend Type for Quadruplex	20-SDMS-02	Fig. 30
50	2 Set	Phasing Plates (A,B,C).	20-SDMS-02	Fig. 53
51	6	Phasing Plates Mounting Brackets.	20-SDMS-02	Fig. 54
52	1 Set	Danger Sign Plate Complete With Its Accessories	20-SDMS-02	Fig. 49
53	17M	Anti-Climbing Device, Barbed Wire	20-SDMS-02	Fig. 13
54	2	Buckle Type, Locking Clip for Barbed Wire	20-SDMS-02	Fig. 13
55	1	Pole Numbering Base Plate	20-SDMS-02	Fig. 51
56	1 Set	Pole Numbering Plates	20-SDMS-02	Fig. 51
57	1	Equipment Numbering Base Plate	20-SDMS-02	Fig. 52
58	1 Set	Equipment Numbering Plates	20-SDMS-02	Fig. 52
59	8	Terminal Lugs for Cable 4X185mm2 Al.	12-SDMS-02	Fig. 4
60	6	Terminal Lugs for Quadruplex Cable 4X120mm2 Al.	12-SDMS-02	Fig. 4
61	1 Set	L.T One Stay assembly On PMT-Structure/240 (Optional)	SDCS-01	Drw. 310
62	13M	Stay wire 7/3.25, 9.8mm Dia, HDG steel, UTS 65kN Min. (Optional)	SDCS-01	
63	1 Set	M.V—S.C One Stay assembly	SDCS-01	Drw. 312
64	17M	Stay wire 7/4, 12mm Dia, HDG steel, UTS 101kN Min.	SDCS-01	
65	1	Earthwire Support Plate, L 110x110x10x150mm Lg.	20-SDMS-02	Fig. 6
66	1 Set	Danger Sign Mounting Brackets	20-SDMS-02	Fig. 50
67	2	Performed Line Post Insulator Top Tie for Quail.	20-SDMS-02	Fig. 35

DRW.189A2/2-SINGLE POLE MOUNTED TRANSFORMER 50kVA ON 14M M.V LIGHT ANGLE STRUCTURE (6°-15°) WITH PMT CABINET



# الشركة السعودية للكهرباء

## SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFEREN	NCES
01	1	OC14S-14 Meter Steel Pole, HDG, Single Circuit	20-SDMS-01	Page 36
02	1	Crossarm-L 100x100x12x2400mm L.G.	20-SDMS-02	Fig. 1
03	1	Fuse Cut-Out Mounting Channel-Single Pole 125x65x65x6x2400mm L.G.	20-SDMS-02	Fig.
04	1	Brace-L 50x50x4x828mm L.G.	20-SDMS-02	Fig. 4
05	1	Brace-L 50x50x4x828mm L.G. With One End Clipped	20-SDMS-02	Fig. 4
06	2	Brace-L 50x50x4x828mm L.G. With Both End Clipped	20-SDMS-02	Fig.
07	5	Line Post Insulator	15-SDMS-01	Clause 4.2.8
80	3 Set	Preformed Armour Rods For 170.5mm2 ACSR/AW (Merlin)	20-SDMS-02	Fig. 38
09	1 Set	Preformed Armour Rod for 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 38
10	3 Set	Preformed Line Post Insulator Side Tie for Merlin With Armour	20-SDMS-02	Fig. 35
11	4	Machine Bolt, M20x60mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
12	3	Machine Bolt, M20x225mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
13	2	Machine Bolt, M20x285mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
14	2	Machine Bolt, M20x365mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
15	2	Machine Bolt, M20x400mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
16	1	Machine Bolt, M16x310mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
17	3	Parallel Groove Compression Connector for Merlin — Quail	20-SDMS-02	Fig. 39
18	1	Transformer, 100KVA	51-SDMS-01	
19	3	Fuse Cut-Out (Complete Assembly)	34-SDMS-01	
20	3	Terminal Plug For 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 42
21	9	Terminal Lug for 35mm2 Cu.	12-SDMS-02	Fig. 1
22	3	Surge Arrester	35-SDMS-01	
23	15M	70mm2 Cu. Bare Conductor		
24	21M	Quail Conductor, 67.44mm2 ACSR/AW	10-SDMS-01	
25	9М	Cu. Conductor, Insulated Stranded 35mm2 Soft Drawn		
26	3	35mm2 Cu. Flexible Cored Wire with Lugs	20-SDMS-02	
27	2	Crimpit Cu. Connector for 70mm2	20-SDMS-02	Fig. 45
28	1	Ground Wire Guard	20-SDMS-02	Fig. 47
29	1	P.M.T. Cabinet 400A	31-SDMS-03	
30	4M	Cable Al. — 4x185mm2 Main Incoming	11-SDMS-01	
31	2	Cable Tie	20-SDMS-02	Fig. 63
32	6	Insulated Type Sleeve for Connecting Quadruplex/120mm2—120mm2	20-SDMS-02	Fig. 34
33	10M	Stainless Steel Strap Band	20-SDMS-02	Fig. 55
34	10	Buckle for Stainless Steel Strap Band	20-SDMS-02	Fig. 55
35	3м	Rigid PVC Sleeve for Stainless Steel Strap	20-SDMS-02	Fig. 55

DRW.189B1/2-SINGLE POLE MOUNTED TRANSFORMER 100kVA ON 14M M.V LIGHT ANGLE STRUCTURE (6°-15°) WITH PMT CABINET

TRSP1A



# الشركة السعودية للكهرباء

## SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFEREN	ICES
36	11	Terminal Lug 70mm2 Cu. Cable	12-SDMS-02	
37	18M	Cu. Conductor Insulated Stranded 70mm2 Soft Drawn		
38	18M	Quadruplex Cable 120mm2 Al.	11-SDMS-02	
39	2	Polyethelene Rigid Pipe, 3 Mtrs. 70mm O.D. 3mm Thickness	20-SDMS-02	
40	2	Weather Head, Al. for 70mm O.D. PVC 3mm Thickness	20-SDMS-02	
41	2	Flexible Pipe, 1Mtr. 70mm O.D. PVC Rigid Pipe for Outgoing Cable	20-SDMS-02	
42	1	Flexible Pipe, 4 Mtrs. 75mm I.D for 4x185mm2 Incoming Cable	20-SDMS-02	
43	1	Earth Wire Suspension Support	20-SDMS-02	Fig. 05
44	2	Anchore Shackle	20-SDMS-02	Fig. 20
45	1	Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu70mm2 Al.	20-SDMS-02	
46	2	Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu120mm2 Al.	20-SDMS-02	
47	2	Suspension Insulator	15-SDMS-01	Clause 4.2.5
48	2	Clevis Eye Extension	20-SDMS-02	Fig. 21
49	2	Strain Clamp, Straight Line Deadend Type for Quadruplex	20-SDMS-02	Fig. 30
50	2 Set	Phasing Plates (A,B,C).	20-SDMS-02	Fig. 53
51	6	Phasing Plates Mounting Brackets.	20-SDMS-02	Fig. 54
52	1 Set	Danger Sign Plate Complete With Its Accessories	20-SDMS-02	Fig. 49
53	17M	Anti-Climbing Device, Barbed Wire	20-SDMS-02	Fig. 13
54	2	Buckle Type, Locking Clip for Barbed Wire	20-SDMS-02	Fig. 13
55	1	Pole Numbering Base Plate	20-SDMS-02	Fig. 51
56	1 Set	Pole Numbering Plates	20-SDMS-02	Fig. 51
57	1	Equipment Numbering Base Plate	20-SDMS-02	Fig. 52
58	1 Set	Equipment Numbering Plates	20-SDMS-02	Fig. 52
59	8	Terminal Lugs for Cable 4X185mm2 Al.	12-SDMS-02	Fig. 4
60	6	Terminal Lugs for Quadruplex Cable 4X120mm2 Al.	12-SDMS-02	Fig. 4
61	1 Set	L.T One Stay assembly On PMT-Structure/240 (Optional)	SDCS-01	Drw. 310
62	13M	Stay wire 7/3.25, 9.8mm Dia, HDG steel, UTS 65kN Min. (Optional)	SDCS-01	
63	1 Set	M.V-S.C One Stay assembly	SDCS-01	Drw. 312
64	17M	Stay wire 7/4, 12mm Dia, HDG steel, UTS 101kN Min.	SDCS-01	
65	1	Earthwire Support Plate, L 110x110x10x150mm Lg.	20-SDMS-02	Fig. 6
66	1 Set	Danger Sign Mounting Brackets	20-SDMS-02	Fig. 50
67	2	Performed Line Post Insulator Top Tie for Quail	20-SDMS-02	Fig. 35

DRW.189B2/2-SINGLE POLE MOUNTED TRANSFORMER 100kVA ON 14M M.V LIGHT ANGLE STRUCTURE (6°-15°) WITH PMT CABINET

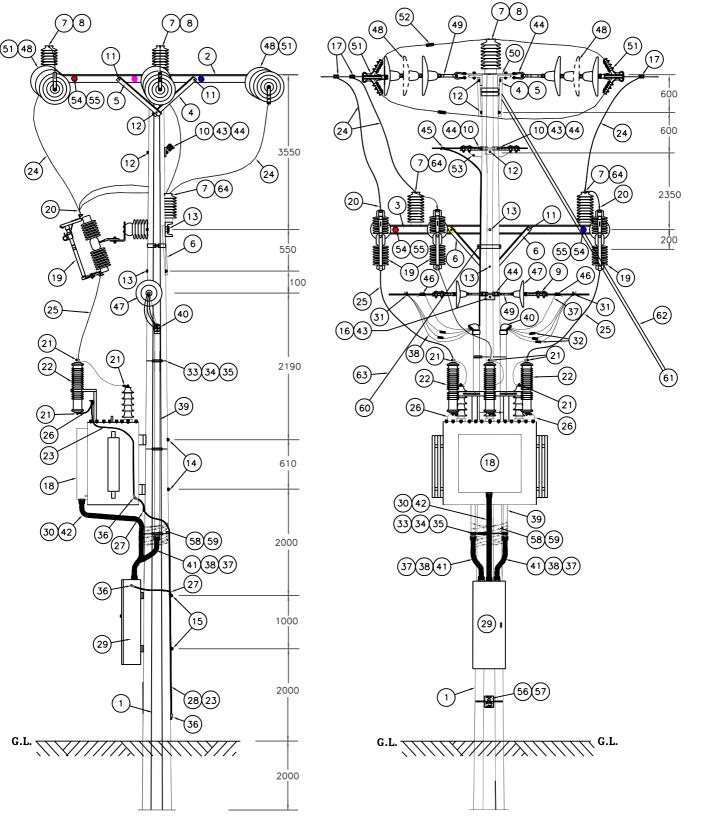


## الشركة السعودية للكهرباء

SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G



DRW.190-SINGLE POLE MOUNTED TRANSFORMER 50/100kVA ON 14M M.V MEDIUM & HEAVY ANGLE STRUCTURE (16°-90°) WITH PMT CABINET

ALL DIMENSIONS ARE IN MILLIMETER



# الشركة السعودية للكهرباء

## SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFEREN	ICES
01	1	OC14S-14 Meter Steel Pole, HDG, Single Circuit	20-SDMS-01	Page 36
02	2	Crossarm-L 100x100x12x2400mm L.G.	20-SDMS-02	Fig. 1
03	1	Fuse Cut—Out Mounting Channel—Single Pole 125x65x65x6x2400mm L.G.	20-SDMS-02	Fig.
04	2	Brace-L 50x50x4x828mm L.G.	20-SDMS-02	Fig. 4
05	2	Brace-L 50x50x4x828mm L.G. With One End Clipped	20-SDMS-02	Fig. 4
06	2	Brace—L 50x50x4x828mm L.G. With Both End Clipped	20-SDMS-02	Fig.
07	4	Line Post Insulator	15-SDMS-01	Clause 4.2.8
80	2 Set	Performed Line Post Insulator Top Tie for Merlin ACSR	20-SDMS-02	Fig. 35
09	2	Strain Clamp straight line deadend type for Quadruplex	20-SDMS-02	Fig. 30
10	2	Strain Clamp straight line deadend type for Quail ACSR	20-SDMS-02	Fig. 30
11	12	Machine Bolt, M20x60mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
12	3	Machine Bolt, M20x225mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
13	2	Machine Bolt, M20x285mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
14	2	Machine Bolt, M20x365mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
15	2	Machine Bolt, M20x400mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
16	1	Machine Bolt, M16x310mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
17	3	Parallel Groove Compression Connector for Merlin — Quail	20-SDMS-02	Fig. 39
18	1	Transformer, 50KVA	51-SDMS-01	
19	3	Fuse Cut—Out (Complete Assembly)	34-SDMS-01	
20	3	Terminal Plug For 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 42
21	9	Terminal Lug for 35mm2 Cu.	20-SDMS-02	Fig. 46
22	3	Surge Arrester	35-SDMS-01	
23	15M	70mm2 Copper. Bare Conductor		
24	21M	Quail Conductor, 67.44mm2 ACSR/AW	10-SDMS-01	
25	9М	Copper Conductor, Insulated Stranded 35mm2 Soft Drawn		
26	3	35mm2 Cu. Flexible Cored Wire with Lugs	20-SDMS-02	
27	2	Crimpit Cu. Connector for 70mm2	20-SDMS-02	Fig. 45
28	1	Ground Wire Guard	20-SDMS-02	Fig. 47
29	1	P.M.T. Cabinet 400A	31-SDMS-03	
30	4M	Cable Al. — 4x185mm2 Main Incoming	11-SDMS-01	
31	2	Cable Tie	20-SDMS-02	Fig. 63
32	6	Insulated Type Sleeve for Connecting Quadruplex/120mm2—120mm2	20-SDMS-02	Fig. 34
33	10M	Stainless Steel Strap Band	20-SDMS-02	Fig. 55
34	10	Buckle for Stainless Steel Strap Band	20-SDMS-02	Fig. 55
35	3M	Rigid PVC Sleeve for Stainless Steel Strap	20-SDMS-02	Fig. 55

DRW.190A1/2-SINGLE POLE MOUNTED TRANSFORMER 50kVA ON 14M M.V MEDIUM & HEAVY ANGLE STRUCTURE (16°-90°) WITH PMT CABINET



# الشركة السعودية للكهرباء

## SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

CEDIAI	1	<u>'</u>	1	
SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFEREN	ICES
36	11	Terminal Lug for 70mm2 Cu. Cable	12-SDMS-02	
37	18M	Copper Conductor Insulated Stranded 70mm2 Soft Drawn		
38	18M	Quadruplex Cable 120mm2	11-SDMS-02	
39	2	Polyethelene Rigid Pipe, 3 Mtrs. 70mm O.D. 3mm Thickness	20-SDMS-02	
40	2	Weather Head, Al. for 70mm O.D. PVC 3mm Thickness	20-SDMS-02	
41	2	Flexible Pipe, 1Mtr. for 70mm O.D. PVC Rigid Pipe for Outgoing Cable	20-SDMS-02	
42	1	Flexible Pipe, 4 Mtrs, 75mm ID. for 4x185mm2 Incoming Cable	20-SDMS-02	
43	2	Earth Wire Suspension Support	20-SDMS-02	Fig. 05
44	10	Anchor Shackle	20-SDMS-02	Fig. 20
45	1	Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu70mm2 Al.	20-SDMS-02	
46	2	Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu120mm2 Al.	20-SDMS-02	
47	2	Suspension Insulator (Single)	15-SDMS-01	Clause 4.2.5
48	6 Set	Suspension Insulator	15-SDMS-01	Clause 4.2.5
49	8	Clevis Eye Extension	20-SDMS-02	Fig. 21
50	3	Double Arming Plate	20-SDMS-02	Fig. 07
51	6	Strain Clamp 3 U—Bolts type for Merlin	20-SDMS-02	Fig. 29
52	3	Parallel Groove Compression Connector for 170mm2 ACSR/AW (Merlin-Merlin)	20-SDMS-02	Fig. 39
53	1	Parallel Groove Compression Connector for 67.44mm2 ACSR/AW (Quail-Quail)	20-SDMS-02	Fig. 39
54	2 Set	Phasing Plates (A,B,C).	20-SDMS-02	Fig. 53
55	6	Phasing Plates Mounting Brackets.	20-SDMS-02	Fig. 54
56	1 Set	Danger Sign Plate Complete With Its Accessories	20-SDMS-02	Fig. 49
57	1 Set	Danger Sign Mounting Brackets	20-SDMS-02	Fig. 50
58	17M	Anti-Climbing Device, Barbed Wire	20-SDMS-02	Fig. 13
59	2	Buckle Type, Locking Clip for Barbed Wire	20-SDMS-02	Fig. 13
60	1 Set	L.T One Stay Assembly On PMT -Structure/240 (Optional)	SDCS-01	Drw. 321
61	1 Set	M.V-S.C Two Stay Assembly	SDCS-01	Drw. 313
62	34M	Stay wire 7/4, 12mm Dia, HDG Steel UTS 101kN Min.	SDCS-01	
63	13M	Stay wire 7/3.25, 9.8mm Dia, HDG Steel UTS 65kN Min. (Optional)	SDCS-01	
64	2	Performed Line Post Insulator Top Tie for Quail	20-SDMS-02	Fig. 35
65	1	Pole Numbering Base Plate	20-SDMS-02	Fig. 51
66	1 Set	Pole Numbering Plates	20-SDMS-02	Fig. 51
67	1	Equipment Numbering Base Plate	20-SDMS-02	Fig. 52
68	1 Set	Equipment Numbering Plates	20-SDMS-02	Fig. 52
69	8	Terminal Lugs for Cable 4X185mm2 Al.	12-SDMS-02	Fig. 4
70	6	Terminal Lugs for Quadruplex Cable 4X120mm2 Al.	12-SDMS-02	Fig. 4

DRW.190A2/2-SINGLE POLE MOUNTED TRANSFORMER 50kVA ON 14M M.V MEDIUM & HEAVY ANGLE STRUCTURE (16°-90°) WITH PMT CABINET



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DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFEREN	ICES
01	1	OC14S-14 Meter Steel Pole, HDG, Single Circuit	20-SDMS-01	Page 36
02	2	Crossarm-L 100x100x12x2400mm L.G.	20-SDMS-02	Fig. 1
03	1	Fuse Cut-Out Mounting Channel-Single Pole 125x65x65x6x2400mm L.G.	20-SDMS-02	Fig.
04	2	Brace-L 50x50x4x828mm L.G.	20-SDMS-02	Fig. 4
05	2	Brace-L 50x50x4x828mm L.G. With One End Clipped	20-SDMS-02	Fig. 4
06	2	Brace-L 50x50x4x828mm L.G. With Both End Clipped	20-SDMS-02	Fig.
07	4	Line Post Insulator	15-SDMS-01	Clause 4.2.8
08	2 Set	Performed Line Post Insulator Top Tie for Merlin ACSR	20-SDMS-02	Fig. 35
09	2	Strain Clamp straight line deadend type for Quadruplex	20-SDMS-02	Fig. 30
10	2	Strain Clamp straight line deadend type for Quail ACSR	20-SDMS-02	Fig. 30
11	12	Machine Bolt, M20x60mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
12	3	Machine Bolt, M20x225mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
13	2	Machine Bolt, M20x285mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
14	2	Machine Bolt, M20x365mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
15	2	Machine Bolt, M20x400mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
16	1	Machine Bolt, M16x310mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
17	3	Parallel Groove Compression Connector for Merlin — Quail	20-SDMS-02	Fig. 39
18	1	Transformer, 100KVA	51-SDMS-01	
19	3	Fuse Cut-Out (Complete Assembly)	34-SDMS-01	
20	3	Terminal Plug For 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 42
21	9	Terminal Lug for 35mm2 Cu.	20-SDMS-02	Fig. 46
22	3	Surge Arrester	35-SDMS-01	
23	15M	70mm2 Copper. Bare Conductor		
24	21M	Quail Conductor, 67.44mm2 ACSR/AW	10-SDMS-01	
25	9М	Copper Conductor, Insulated Stranded 35mm2 Soft Drawn		
26	3	35mm2 Cu. Flexible Cored Wire with Lugs	20-SDMS-02	
27	2	Crimpit Cu. Connector for 70mm2	20-SDMS-02	Fig. 45
28	1	Ground Wire Guard	20-SDMS-02	Fig. 47
29	1	P.M.T. Cabinet 400A	31-SDMS-03	
30	4M	Cable Al. — 4x185mm2 Main Incoming	11-SDMS-01	
31	2	Cable Tie	20-SDMS-02	Fig. 63
32	6	Insulated Type Sleeve for Connecting Quadruplex/120mm2-120mm2	20-SDMS-02	Fig. 34
33	10M	Stainless Steel Strap Band	20-SDMS-02	Fig. 55
34	10	Buckle for Stainless Steel Strap Band	20-SDMS-02	Fig. 55
35	3М	Rigid PVC Sleeve for Stainless Steel Strap	20-SDMS-02	Fig. 55

DRW.190B1/2-SINGLE POLE MOUNTED TRANSFORMER 100kVA ON 14M M.V MEDIUM & HEAVY ANGLE STRUCTURE (16°-90°) WITH PMT CABINET



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## SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

CDD14					
SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFEREN	ICES	
36	11	Terminal Lug for 70mm2 Cu. Cable	12-SDMS-02		
37	18м	Copper Conductor Insulated Stranded 70mm2 Soft Drawn			
38	18M	Quadruplex Cable 120mm2	11-SDMS-02		
39	2	Polyethelene Rigid Pipe, 3 Mtrs. 70mm O.D. 3mm Thickness	20-SDMS-02		
40	2	Weather Head, Al. for 70mm O.D. PVC 3mm Thickness	20-SDMS-02		
41	2	Flexible Pipe, 1Mtr. for 70mm O.D. PVC Rigid Pipe for Outgoing Cable	20-SDMS-02		
42	1	Flexible Pipe, 4 Mtrs, 75mm ID. for 4x185mm2 Incoming Cable	20-SDMS-02		
43	2	Earth Wire Suspension Support	20-SDMS-02	Fig. 05	
44	10	Anchor Shackle	20-SDMS-02	Fig. 20	
45	1	Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu70mm2 Al.	20-SDMS-02		
46	2	Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu120mm2 Al.	20-SDMS-02		
47	2	Suspension Insulator (Single)	15-SDMS-01	Clause 4.2.5	
48	6 Set	Suspension Insulator	15-SDMS-01	Clause 4.2.5	
49	8	Clevis Eye Extension	20-SDMS-02	Fig. 21	
50	3	Double Arming Plate	20-SDMS-02	Fig. 07	
51	6	Strain Clamp 3 U—Bolts type for Merlin	20-SDMS-02	Fig. 29	
52	3	Parallel Groove Compression Connector for 170mm2 ACSR/AW (Merlin—Merlin)	20-SDMS-02	Fig. 39	
53	1	Parallel Groove Compression Connector for 67.44mm2 ACSR/AW (Quail-Quail)	20-SDMS-02	Fig. 39	
54	2 Set	Phasing Plates (A,B,C).	20-SDMS-02	Fig. 53	
55	6	Phasing Plates Mounting Brackets.	20-SDMS-02	Fig. 54	
56	1 Set	Danger Sign Plate Complete With Its Accessories	20-SDMS-02	Fig. 49	
57	1 Set	Danger Sign Mounting Brackets	20-SDMS-02	Fig. 50	
58	17M	Anti-Climbing Device, Barbed Wire	20-SDMS-02	Fig. 13	
59	2	Buckle Type, Locking Clip for Barbed Wire	20-SDMS-02	Fig. 13	
60	1 Set	L.T One Stay Assembly On PMT -Structure/240 (Optional)	SDCS-01	Drw. 321	
61	1 Set	M.V-S.C Two Stay Assembly	SDCS-01	Drw. 313	
62	34M	Stay wire 7/4, 12mm Dia, HDG Steel UTS 101kN Min.	SDCS-01		
63	13M	Stay wire 7/3.25, 9.8mm Dia, HDG Steel UTS 65kN Min. (Optional)	SDCS-01		
64	2	Performed Line Post Insulator Top Tie for Quail	20-SDMS-02	Fig. 35	
65	1	Pole Numbering Base Plate	20-SDMS-02	Fig. 51	
66	1 Set	Pole Numbering Plates	20-SDMS-02	Fig. 51	
67	1	Equipment Numbering Base Plate	20-SDMS-02	Fig. 52	
68	1 Set	Equipment Numbering Plates	20-SDMS-02	Fig. 52	
69	8	Terminal Lugs for Cable 4X185mm2 Al.	12-SDMS-02	Fig. 4	
70	6	Terminal Lugs for Quadruplex Cable 4X120mm2 Al.	12-SDMS-02	Fig. 4	

DRW.190B2/2-SINGLE POLE MOUNTED TRANSFORMER 100kVA ON 14M M.V MEDIUM & HEAVY ANGLE STRUCTURE (16°-90°) WITH PMT CABINET

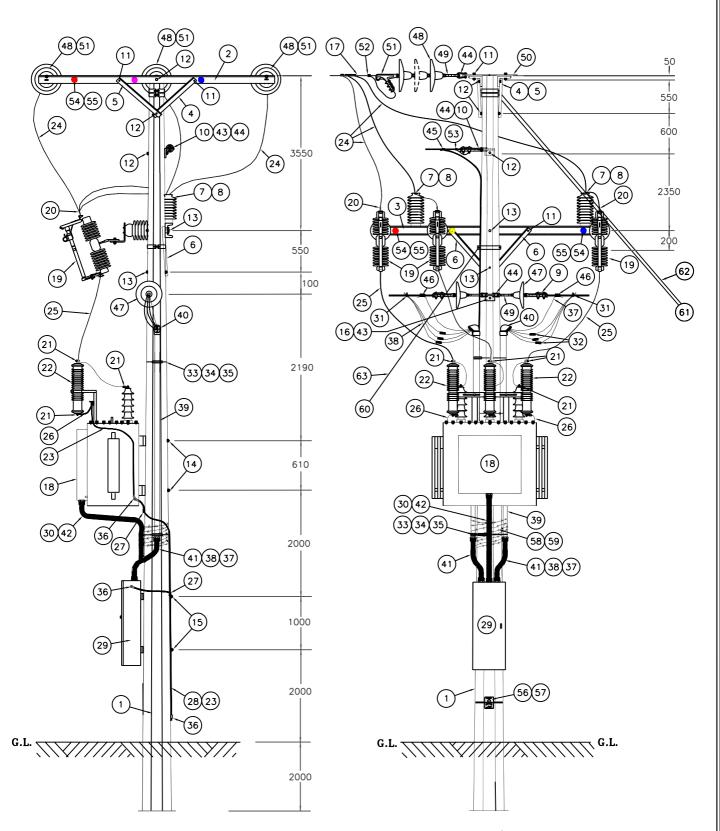


# الشركة السعودية للكهرباء

SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G



DRW.191-SINGLE POLE MOUNTED TRANSFORMER 50/100kVA ON 14M M.V TERMINAL STRUCTURE WITH STAYS & PMT CABINET

ALL DIMENSIONS ARE IN MILLIMETER



# الشركة السعودية للكهرباء

## SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFEREN	ICES
01	1	OC14S-14 Meter Steel Pole, HDG, Single Circuit	20-SDMS-01	Page 36
02	2	Crossarm-L 100x100x12x2400mm L.G.	20-SDMS-02	Fig. 1
03	1	Fuse Cut—Out Mounting Channel—Single Pole 125x65x65x6x2400mm L.G.	20-SDMS-02	Fig.
04	2	Brace-L 50x50x4x828mm L.G.	20-SDMS-02	Fig. 4
05	2	Brace-L 50x50x4x828mm L.G. With One End Clipped	20-SDMS-02	Fig. 4
06	2	Brace-L 50x50x4x828mm L.G. With Both End Clipped	20-SDMS-02	Fig.
07	2	Line Post Insulator	15-SDMS-01	Clause 4.2.8
80	2 Set	Performed Line Post Insulator Top Tie for Quail.	20-SDMS-02	Fig. 35
09	2	Strain Clamp straight line deadend type for Quadruplex	20-SDMS-02	Fig. 30
10	1	Strain Clamp straight line deadend type for Quail ACSR	20-SDMS-02	Fig. 30
11	12	Machine Bolt, M20x60mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
12	3	Machine Bolt, M20x225mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
13	2	Machine Bolt, M20x285mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
14	2	Machine Bolt, M20x365mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
15	2	Machine Bolt, M20x400mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
16	1	Machine Bolt, M16x310mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15
17	3	Parallel Groove Compression Connector for Merlin — Quail	20-SDMS-02	Fig. 39
18	1	Transformer, 50KVA	51-SDMS-01	
19	3	Fuse Cut—Out (Complete Assembly)	34-SDMS-01	
20	3	Terminal Plug For 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 42
21	9	Terminal Lug for 35mm2 Cu.	20-SDMS-02	Fig. 46
22	3	Surge Arrester	35-SDMS-01	
23	15M	70mm2 Copper. Bare Conductor		
24	21M	Quail Conductor, 67.44mm2 ACSR/AW	10-SDMS-01	
25	9М	Copper Conductor, Insulated Stranded 35mm2 Soft Drawn		
26	3	35mm2 Cu. Flexible Cored Wire with Lugs	20-SDMS-02	
27	2	Crimpit Cu. Connector for 70mm2	20-SDMS-02	Fig. 45
28	1	Ground Wire Guard	20-SDMS-02	Fig. 47
29	1	P.M.T. Cabinet 400A	31-SDMS-03	
30	4M	Cable Al. — 4x185mm2 Main Incoming	11-SDMS-01	
31	2	Cable Tie	20-SDMS-02	Fig. 63
32	6	Insulated Type Sleeve for Connecting Quadruplex/120mm2—120mm2	20-SDMS-02	Fig. 34
33	10M	Stainless Steel Strap Band	20-SDMS-02	Fig. 55
34	10	Buckle for Stainless Steel Strap Band	20-SDMS-02	Fig. 55
35	3м	Rigid PVC Sleeve for Stainless Steel Strap	20-SDMS-02	Fig. 55

DRW.191A1/2-SINGLE POLE MOUNTED TRANSFORMER 50kVA ON 14M M.V TERMINAL STRUCTURE WITH STAYS & PMT CABINET



# الشركة السعودية للكهرباء

## SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL	QTY	BILL OF MATERIALS DESCRIPTION	REFEREN	NCES
<b>NO.</b> 36	11	Terminal Lug for 70mm2 Cu. Cable	12-SDMS-02	
37	18M	Copper Conductor Insulated Stranded 70mm2 Soft Drawn	12 301113 02	
38	18M	Quadruplex Cable 120mm2	11-SDMS-02	
39	2	Polyethelene Rigid Pipe, 3 Mtrs. 70mm O.D. 3mm Thickness	20-SDMS-02	
40	2	Weather Head, Al. for 70mm O.D. PVC 3mm Thickness	20-SDMS-02	
41	2	Flexible Pipe, 1Mtr. for 70mm O.D. PVC Rigid Pipe for Outgoing Cable	20-SDMS-02	
42	1	Flexible Pipe, 4 Mtrs, 75mm ID. for 4x185mm2 Incoming Cable	20-SDMS-02	
43	2	Earth Wire Suspension Support	20-SDMS-02	Fig. 05
44	6	Anchor Shackle	20-SDMS-02	_
45	1	Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu70mm2 Al.	20-SDMS-02	
46	2	Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu.—120mm2 Al.	20-SDMS-02	
47	2	Suspension Insulator (Single)	15-SDMS-01	Clause 4.2.5
48	3 Set	Suspension Insulator	15-SDMS-01	Clause 4.2.5
49	5	Clevis Eye Extension	20-SDMS-02	Fig. 21
50	3	Double Arming Plate	20-SDMS-02	Fig. 07
51	3	Strain Clamp 3 U-Bolts type for Merlin	20-SDMS-02	Fig. 29
52	3	Parallel Groove clamp 3 Bolts type for Merlin ACSR/AW 170mm2	20-SDMS-02	Fig. 39
53	1	Parallel Groove clamp 2 bolts type for Quail ACSR/AW 67.44mm2	20-SDMS-02	Fig. 39
54	2 Set	Phasing Plates (A,B,C).	20-SDMS-02	Fig. 53
55	6	Phasing Plates Mounting Brackets.	20-SDMS-02	Fig. 54
56	1 Set	Danger Sign Plate Complete With Its Accessories	20-SDMS-02	Fig. 49
57	1 Set	Danger Sign Mounting Brackets	20-SDMS-02	Fig. 50
58	17M	Anti-Climbing Device, Barbed Wire	20-SDMS-02	Fig. 13
59	2	Buckle Type, Locking Clip for Barbed Wire	20-SDMS-02	Fig. 13
60	1 Set	L.T One Stay Assembly On PMT -Structure/240 (Optional)	SDCS-01	Drw. 321
61	1 Set	M.V-S.C Two Stay Assembly	SDCS-01	Drw. 313
62	34M	Stay wire 7/4, 12mm Dia, HDG Steel UTS 101kN Min.	SDCS-01	
63	13M	Stay wire 7/3.25, 9.8mm Dia, HDG Steel UTS 65kN Min. (Optional)	SDCS-01	
64	1	Pole Numbering Base Plate	20-SDMS-02	Fig. 51
65	1 Set	Pole Numbering Plates	20-SDMS-02	Fig. 51
66	1	Equipment Numbering Base Plate	20-SDMS-02	Fig. 52
67	1 Set	Equipment Numbering Plates	20-SDMS-02	Fig. 52
68	8	Terminal Lugs for Cable 4X185mm2 Al.	12-SDMS-02	Fig. 4
69	6	Terminal Lugs for Quadruplex Cable 4X120mm2 Al.	12-SDMS-02	Fig. 4

DRW.191A2/2-SINGLE POLE MOUNTED TRANSFORMER 50kVA ON 14M M.V TERMINAL STRUCTURE WITH STAYS & PMT CABINET



# الشركة السعودية للكهرباء

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DATE: DECEMBER 2005G

SERIAL NO.	QTY	BILL OF MATERIALS DESCRIPTION	REFEREN	REFERENCES	
01	1	OC14S-14 Meter Steel Pole, HDG, Single Circuit	20-SDMS-01	Page 36	
02	2	Crossarm-L 100x100x12x2400mm L.G.	20-SDMS-02	Fig. 1	
03	1	Fuse Cut-Out Mounting Channel-Single Pole 125x65x65x6x2400mm L.G.	20-SDMS-02	Fig.	
04	2	Brace-L 50x50x4x828mm L.G.	20-SDMS-02	Fig. 4	
05	2	Brace-L 50x50x4x828mm L.G. With One End Clipped	20-SDMS-02	Fig. 4	
06	2	Brace-L 50x50x4x828mm L.G. With Both End Clipped	20-SDMS-02	Fig.	
07	2	Line Post Insulator	15-SDMS-01	Clause 4.2.8	
08	2 Set	Performed Line Post Insulator Top Tie for Quail.	20-SDMS-02	Fig. 35	
09	2	Strain Clamp straight line deadend type for Quadruplex	20-SDMS-02	Fig. 30	
10	1	Strain Clamp straight line deadend type for Quail ACSR	20-SDMS-02	Fig. 30	
11	12	Machine Bolt, M20x60mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15	
12	3	Machine Bolt, M20x225mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15	
13	2	Machine Bolt, M20x285mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15	
14	2	Machine Bolt, M20x365mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15	
15	2	Machine Bolt, M20x400mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15	
16	1	Machine Bolt, M16x310mm With Nut, 2 Flat & 1 Spring Washer	20-SDMS-02	Fig. 15	
17	3	Parallel Groove Compression Connector for Merlin — Quail	20-SDMS-02	Fig. 39	
18	1	Transformer, 100KVA	51-SDMS-01		
19	3	Fuse Cut—Out (Complete Assembly)	34-SDMS-01		
20	3	Terminal Plug For 67.44mm2 ACSR/AW (Quail)	20-SDMS-02	Fig. 42	
21	9	Terminal Lug for 35mm2 Cu.	20-SDMS-02	Fig. 46	
22	3	Surge Arrester	35-SDMS-01		
23	15M	70mm2 Copper. Bare Conductor			
24	21M	Quail Conductor, 67.44mm2 ACSR/AW	10-SDMS-01		
25	9М	Copper Conductor, Insulated Stranded 35mm2 Soft Drawn			
26	3	35mm2 Cu. Flexible Cored Wire with Lugs	20-SDMS-02		
27	2	Crimpit Cu. Connector for 70mm2	20-SDMS-02	Fig. 45	
28	1	Ground Wire Guard	20-SDMS-02	Fig. 47	
29	1	P.M.T. Cabinet 400A	31-SDMS-03		
30	4M	Cable Al. — 4x185mm2 Main Incoming	11-SDMS-01		
31	2	Cable Tie	20-SDMS-02	Fig. 63	
32	6	Insulated Type Sleeve for Connecting Quadruplex/120mm2—120mm2	20-SDMS-02	Fig. 34	
33	10M	Stainless Steel Strap Band	20-SDMS-02	Fig. 55	
34	10	Buckle for Stainless Steel Strap Band	20-SDMS-02	Fig. 55	
35	3м	Rigid PVC Sleeve for Stainless Steel Strap	20-SDMS-02	Fig. 55	

DRW.191B1/2-SINGLE POLE MOUNTED TRANSFORMER 100kVA ON 14M M.V TERMINAL STRUCTURE WITH STAYS & PMT CABINET



# الشركة السعودية للكهرباء

#### SEC DISTRIBUTION CONSTRUCTION STANDARDS

SDCS-01

DATE: DECEMBER 2005G

SERIAL	QTY	BILL OF MATERIALS DESCRIPTION		
<b>NO.</b> 36	11	Terminal Lug for 70mm2 Cu. Cable	REFEREN 12-SDMS-02	1323
37	18M	Copper Conductor Insulated Stranded 70mm2 Soft Drawn	12-301/03-02	
38	18M	Quadruplex Cable 120mm2	11-SDMS-02	
39	2	Polyethelene Rigid Pipe, 3 Mtrs. 70mm O.D. 3mm Thickness	20-SDMS-02	
40	2	Weather Head, Al. for 70mm O.D. PVC 3mm Thickness	20-SDMS-02	
41	2	Flexible Pipe, 1Mtr. for 70mm O.D. PVC Rigid Pipe for Outgoing Cable	20-SDMS-02	
42	1	Flexible Pipe, 4 Mtrs, 75mm ID. for 4x185mm2 Incoming Cable	20-SDMS-02	
43	2	Earth Wire Suspension Support	20-SDMS-02	Fig. 05
44	6	Anchor Shackle	20-SDMS-02	-
45	1	Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu70mm2 Al.	20-SDMS-02	1 ig. 20
46	2	Bi-Metallic Connector, 2 Bolts Type for 70mm2 Cu120mm2 Al.	20-SDMS-02	
47	2	Suspension Insulator (Single)	15-SDMS-01	Clause 4.2.5
48	3 Set	Suspension Insulator	15-SDMS-01	Clause
49	5	Clevis Eye Extension	20-SDMS-02	4.2.5 Fig. 21
50	3	Double Arming Plate	20-SDMS-02	
51	3	Strain Clamp 3 U-Bolts type for Merlin	20-SDMS-02	
52	3	Parallel Groove clamp 3 Bolts type for Merlin ACSR/AW 170mm2	20-SDMS-02	<u> </u>
53	1	Parallel Groove clamp 2 bolts type for Quail ACSR/AW 67.44mm2	20-SDMS-02	
54	2 Set	Phasing Plates (A,B,C).	20-SDMS-02	-
55	6	Phasing Plates Mounting Brackets.	20-SDMS-02	-
56	1 Set	Danger Sign Plate Complete With Its Accessories	20-SDMS-02	
57	1 Set	Danger Sign Mounting Brackets	20-SDMS-02	Fig. 50
58	17M	Anti-Climbing Device, Barbed Wire	20-SDMS-02	Fig. 13
59	2	Buckle Type, Locking Clip for Barbed Wire	20-SDMS-02	
60	1 Set	L.T One Stay Assembly On PMT —Structure/240 (Optional)	SDCS-01	Drw. 321
61	1 Set	M.V-S.C Two Stay Assembly	SDCS-01	Drw. 313
62	34M	Stay wire 7/4, 12mm Dia, HDG Steel UTS 101kN Min.	SDCS-01	
63	13M	Stay wire 7/3.25, 9.8mm Dia, HDG Steel UTS 65kN Min. (Optional)	SDCS-01	
64	1	Pole Numbering Base Plate	20-SDMS-02	Fig. 51
65	1 Set	Pole Numbering Plates	20-SDMS-02	Fig. 51
66	1	Equipment Numbering Base Plate	20-SDMS-02	Fig. 52
67	1 Set	Equipment Numbering Plates	20-SDMS-02	Fig. 52
68	8	Terminal Lugs for Cable 4X185mm2 Al.	12-SDMS-02	Fig. 4
69	6	Terminal Lugs for Quadruplex Cable 4X120mm2 Al.	12-SDMS-02	Fig. 4
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DRW.191B2/2-SINGLE POLE MOUNTED TRANSFORMER 100kVA ON 14M M.V TERMINAL STRUCTURE WITH STAYS & PMT CABINET